COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

PIEDMONT REGIONAL OFFICE
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Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

Michael P. Murphy
Regional Director

October 30, 2014

Mr. Richard T. Elder, Jr.
Dominion – Chesterfield Power Station Director
Chesterfield Power Station
500 Coxendale Road
Chester, VA 23836

Location: Chester, VA
Registration No: PRO 50396-26
County-Plant Identification No: 041-00002

Dear Mr. Elder,

Attached is a Title V permit renewal to operate your facility pursuant to 9 VAC 5 Chapter 80 of the Virginia Regulations for the Control and Abatement of Air Pollution.

This permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and civil penalty. Please read all conditions carefully.

This approval to operate does not relieve Dominion Resources Services Inc. of the responsibility to comply with all other local, state, and federal permit regulations.

Issuance of this permit is a case decision. The Regulations, at 9 VAC 5-170-200, provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this permit is mailed or delivered to you. Please consult that and other relevant provisions for additional requirements for such requests.

Additionally, as provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal to court by filing a Notice of Appeal with:

Mr. David K. Paylor, Director
Department of Environmental Quality
P. O. Box 1105
Richmond, VA 23218

In the event that you receive this permit by mail, three days are added to the period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for additional information including filing dates and the required content of the Notice of Appeal.

If you have any questions concerning this permit, please contact Mr. Dick Stone, the Air Permit Writer at (804) 527-5088 or Richard.Stone@deq.virginia.gov or the Piedmont Regional Office at (804) 527 5020.

Sincerely,

Kyle Ivar Winter, P.E.
Deputy Regional Director

KIW/JEK/ROS/503961014.T5.renewal

Attachments: Permit
NSPS, Subpart Y
NSPS, Subpart GG
NSPS, Subpart OOO
NSPS, Subpart IIII
MACT, Subpart ZZZZ
Source Testing Report Format

cc: Director, OAPP (electronic file submission)
Manager, Data Analysis (electronic file submission)
Chief, Air Enforcement Branch (3AP13), U.S. EPA, Region III
Manager/Inspector, Air Compliance

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Federal Operating Permit
Article 3

This permit renewal is based upon Federal Clean Air Act acid rain permitting requirements of Title IV, federal operating permit requirements of Title V; and Chapter 80, Article 3 and Chapter 140 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-360 through 9 VAC 5-80-700 and 9 VAC 5-140-1010 et seq., 9 VAC 5-140-2010 et seq., 9 VAC 5-140-3010 et seg. of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:	Virginia Electric and Power Company
Facility Name:	Chesterfield Power Station
Facility Location:	500 Coxendale Road Chester, VA 23836
Registration Number:	50396
Permit Number:	PRO-50396

This permit includes the following programs:

Federally Enforceable Requirements – Clean Air Act (Sections I through XV)
State Only Enforceable Requirements (Section XVI)
Federally Enforceable Requirements – Title IV Acid Rain (Section XVII)
Federally Enforceable Requirements – Clean Air Interstate Rule (CAIR) (Section XVIII)

January 1, 2015
Effective Date

December 31, 2019
Expiration Date

Kyle Ivar Winter, P.E.
Deputy Regional Director

30 OCTOBER 2014
Signature Date

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Appendix B: VEPCO 2003 Consent Decree
Best Management Practices

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I. Facility Information

Permittee
Virginia Electric and Power Company
5000 Dominion Boulevard
Glen Allen, VA 23060

Responsible Official
Richard T. Elder, Jr.
Dominion – Chesterfield Power Station Director

Acid Rain Designated Representative
Edward H. Baine
Vice-President, Power Generation System Operations
USEPA ATS-AAR ID Number 602099

Facility
Chesterfield Power Station
500 Coxendale Road
Chester, VA 23836

Contact Person
Cathy Taylor
Director, Environmental Support
(804) 273-2929

County-Plant Identification Number: 041-00002
ORIS Code and /or EIA Facility ID (for non-EGU units): 3809

NATS Facility Identification Number : 3809

Facility Description: NAICS Code 221112 – Electrical Power Generation. The Chesterfield Power Station burns fossil fuel for the generation of electrical power. The facility operates four pulverized coal, tangentially-fired dry bottom boilers (ES-3, ES-4, ES-5, ES-6) and two General Electric combined cycle combustion turbines (ES-7, ES-8). Three of the boilers, ES-3, ES-4 and ES-6, are approved to burn coal and no. 2 fuel oil. Boiler ES-5 is approved to burn coal, no. 2 fuel oil and used oil. The two combustion turbines (ES-7, ES-8) are approved to burn natural gas, no. 2 fuel oil and coal gas.

Boilers ES-3, ES-4, and ES-5 each have an electrostatic precipitator (ESP) to control particulate emissions and Boiler ES-6 has a baghouse to control particulate emissions. Boilers ES-4, ES-5, and ES-6 each have a selective catalytic reduction (SCR) system to

control nitrogen dioxide (NOx) emissions. Boilers ES-3, ES-4 and ES-5 have a combined flue gas desulfurization (FDG) unit to control sulfur dioxide (SO2) emissions. Boiler ES-6 has an FGD to control SO_2 emissions. The combustion turbines, ES-7 and ES-8, use steam injection to control NOx emissions.

The facility operates coal and ash handling systems (ES-9a, ES-9a(VF), ES-9c, ES-9cR, ES-9c(S), ES-9c(T), ES-9c(P-1), ES-9c (CS-1), ES-9d, ES-9e, ES-9f, ES-10), and limestone and gypsum handling systems (ES-11a, ES-11b (LS-1), (LS-2), ES-11b (LS-3), ES-11b (LS-4), ES-11b (VF-1), ES-11b (VF-2),ES-11b (VR-3), ES-11c, ES-11d, ES-12 (GYP-1a), ES-12 (GYP-1b), ES-12 (GYP-2), ES-12 (GYP-3), ES-12 (GYP-4), ES-12 (GYP-5), ES-12 (PR), ES-13, ES-14a, ES-14b, ES-14c, ES-14d.

The facility has the following fuel burning equipment: an emergency combustion turbine (IS-2), four emergency generators (IS-38, QWP-5, QWP-6, EDG-78), a fire pump (FP-6), 140 Thaw Shed heaters (IS-30) and a pipeline heater (IS-4).

The facility also has non-halogenated cold solvent degreasers (IS-45).

Nomenclature:

In the text of the Title V permit, the fuel burning equipment is described as follows:

ES-3	Emission Unit ID # ES-3 or boiler three (3) or Unit 3
ES-4	Emission Unit ID # ES-4 or boiler four (4) or Unit 4
ES-5	Emission Unit ID # ES-5 or boiler five (5) or Unit 5
ES-6	Emission Unit ID # ES-6 or boiler six (6) or Unit 6
ES-7	Emission Unit ID # ES-7 or combustion turbine (7) or Unit 7
ES-8	Emission Unit ID # ES-8 or combustion turbine (8) or Unit 8

II. Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Fuel Burning Equipment: Boilers							
ES-3	CS0	Combustion Engineering Tangentially Fire Coal Boiler Equipped with Startup Burners (1952) Coal – primary fuel No. 2 Oil – standby fuel	1155 x 10^6 Btu/hr	Environmental Elements Corporation Electrostatic Precipitator, Staged Combustion Coal Burners, Flue Gas Desulfurization system (FGD)	ESP-3, FGD-0	PM-10, SO2	State Operating Permit July 18, 2012; Acid Rain Permit January 1, 2008
ES-4	CS0	Combustion Engineering Tangentially Fire Coal Boiler Equipped with Startup Burners (1960) Coal – primary fuel No. 2 Oil – standby fuel	1761x 10^6 Btu/hr	American Air Filter Electrostatic Precipitator, Staged Combustion Coal Burners, Selective Catalytic Reduction (SCR), FGD	ESP-4, SCR-4, FGD-0	PM-10, NOx, SO2	State Operating Permit July 18, 2012; Acid Rain Permit January 1, 2008
ES-5	CS0	Combustion Engineering Tangentially Fire Coal Boiler Equipped with startup burner (1964) Coal – primary fuel No. 2 Oil – standby fuel Used Oil – standby fuel	3604x 10^6 Btu/hr	UOP- Air Filter Products Divisions Electrostatic Precipitator, Staged Combustion Coal Burners, SCR, FGD	ESP-5, SCR-5, FGD-0	PM-10, NOx, SO2	State Operating Permit July 18, 2012; Acid Rain Permit January 1, 2008
ES-6	EP-6	Combustion Engineering Tangentially Fire Boiler Coal Boiler Equipped with Startup Burners (1969) Coal – primary fuel No. 2 Oil – standby fuel	6650x 10^6 Btu/hr	Staged Combustion Coal Burners, SCR, Baghouse (BH), Flue Gas (FGD)	SCR-6, BH-6, FGD-6	PM-10, NOx, SO_2	State Operating Permit July 18, 2012; Acid Rain Permit January 1, 2008

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Fuel Burning Equipment: Turbines							
ES-7	EP-7/8	Combustion Turbine General Electric STAG 107F (1990) Natural Gas – primary fuel No. 2 Oil – standby fuel Coal Gas – standby fuel	1980.4 Btu/hr	General Electric Steam Injection System	CD-7	NOx	State Operating Permit July 18, 2012
ES-8	EP-7/8	Combustion Turbine General Electric STAG 107F (1992) Natural Gas – primary fuel No. 2 Oil – standby fuel Coal Gas – standby fuel	1980.4 Btu/hr	General Electric Steam Injection System	CD-8	NOx	State Operating Permit July 18, 2012 Acid Rain Permit January 1, 2008
Coal and Flyash Processing							
ES-9a	EP-9	One (1) Bottom Discharge Coal Unloader equipped with a fixed grizzly screen	2,500 Tons/hr	Air-Cure Inc., Model Number 676-428RF Baghouse	BH-9a	PM-10	State Operating Permit July 18, 2012
ES-9a(VF)	EP-9	Two (2) vibrating feeders	2,500 tons/hr combined	Air-Cure Inc., Model Number 676-428RF Baghouse	BH-9a	PM-10	State Operating Permit July 18, 2012
ES-9c	NA	Coal Conveying System: Continental Conveyors	400-1200 Tons/hr	NA	NA	PM-10	State Operating Permit July 18, 2012
ES-9c (R)	NA	One (1) Coal conveyor (Conveyor R)	1,200 tons/hr	Wet Spray	NA	PM-10	New Source Review Permit, June 13, 2008
ES-9c (S)	NA	One (1) coal feeder (Feeder S)	400 tons/hour	Total Enclosure	NA	PM-10	New Source Review Permit June 13, 2008
ES-9c (T)	NA	One (1) Coal Conveyor (Conveyor T), equipped with a dozer trap	1,200 tons/hr	Dozer Trap - Total Enclosure Conveyor T - Wet Spray	NA	PM-10	New Source Review Permit June 13, 2008

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
ES-9c (P-1)	NA	One (1) coal feed plow (Feed Plow P-1)	1,400 tons/hr	Partial Enclosure	NA	PM-10	Minor NSR permit June 13, 2008
ES-9c (C-1)	NA	One (1) coal conveyor (Conveyor C-1)	1,400 tons/hr	Partial Enclosure and Wet Spray	NA	PM-10	New Source Review Permit June 13, 2008
ES-9c (CS-1)	NA	One (1) radial stacker (Radial Stacker CS-1)	1,400 tons/hr	Partial Enclosure	NA	PM-10	New Source Review June 13, 2008
ES-9d	NA	Coal Pile	750,000 Tons	NA	NA	PM-10	State Operating Permit July 18, 2012
ES-9e	NA	Coal Crushing Operations: One (1) Pennsylvania Crusher Corporation Model TKK 36 x 68 Granulator (2003)	1,000 Tons/hr	Full Enclosure	NA	PM-10	New Source Review Permit January 8, 2004
ES-9f	NA	Coal Crushing Operations: One (1) Pennsylvania Crusher Corporation Model TKK 36 x 68 Granulator (2003)	1,000 Tons/hr	Full Enclosure	NA	PM-10	New Source Review Permit January 8, 2004
ES-10	NA	Fly Ash Reutilization Operations	500,000 Tons/yr	NA	NA	PM-10	State Operating Permit July 18, 2012
Limestone Handling, Gypsum Conveying and Limestone Crushing							
ES-11a	NA	Limestone Receiving Operations One (1) Equilibrium Crane with Clam Shell Dump into Limestone Hopper	750 TPH	Wet Suppression	NA	PM-10	Consent Decree October 10, 2003
ES-11b (LS-1, 2)	NA	Limestone conveyors LS-1, LS-2	750 TPH	Full enclosure	NA	PM-10	Consent Decree October 10, 2003

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
ES-11b (LS-3)	NA	Limestone conveyor LS-3	300 TPH	Full enclosure or equivalent	NA	PM-10	Consent Decree October 10, 2003
ES-11b (LS-4)	NA	Limestone conveyor LS-4	300 TPH	Full enclosure or equivalent	NA	PM-10	Consent Decree October 10, 2003
ES-11b (VF-1)	NA	Vibrating Feeder VF-1	300 TPH	Full enclosure or equivalent	NA	PM-10	Consent Decree October 10, 2003
ES-11b (VF-2)	NA	Vibrating Feeder VF-2	300 TPH	Full enclosure or equivalent	NA	PM-10	Consent Decree October 10, 2003
ES-11b (VF-3)	NA	Vibrating Feeder VF-3	300 TPH	Full enclosure or equivalent	NA	PM-10	Consent Decree October 10, 2003
ES-11c	NA	Limestone Grinding Operations Two (2) METSO Ball Mills	Ball Mills 45 TPH (dry) each TPH	NA	NA	PM-10	Consent Decree October 10, 2003
ES-11d	NA	Limestone Storage Pile	8,000 Tons	NA	NA	PM-10	Consent Decree October 10, 2003
ES-12 (GYP-1a)	NA	Gypsum Conveyor GYP-1a	300-600 TPH	Full enclosure or equivalent	NA	PM-10	Consent Decree October 10, 2003
ES-12 (GYP-1b)	NA	Gypsum Conveyor GYP-1b	300-600 TPH	Full enclosure or equivalent	NA	PM-10	Consent Decree October 10, 2003
ES-12 (GYP-2)	NA	Gypsum Conveyor GPY- 2	300-600 TPH	Full enclosure or equivalent	NA	PM-10	Consent Decree October 10, 2003

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
ES-12 (GYP-3)	NA	Gypsum Conveyor GPY-3	300-600 TPH	Full enclosure or equivalent	NA	PM-10	Consent Decree October 10, 2003
ES-12 (GYP-4)	NA	Gypsum Conveyor GYP-4	300-600 TPH	Full enclosure or equivalent	NA	PM-10	Consent Decree October 10, 2003
ES-12 (GYP-5)	NA	Gypsum load out Conveyor GYP-5	300-600 TPH	Full enclosure or equivalent	NA	PM-10	Consent Decree October 10, 2003
ES-12 (PR)	NA	Gypsum Reclaimer	300-600 TPH	Full enclosure or equivalent	NA	PM-10	Consent Decree October 10, 2003
ES-13	EP-13	Limestone Crushing Operations One (1) Grinder associated with SO3 Abatement system	12.5 THH	Fabric Filter	FF-13	PM-10	Consent Decree October 10, 2003
ES-14a	EP-14a	S-Sorb Receiving Silo (190 tons storage capacity)	50 tons/hr	Fabric filter	FF-14a	PM-10	New Source Review Permit May 4, 2011
ES-14b	EP-14b	S-Sorb Active Silo (150 tons storage capacity) and fabric filter	50 tons/hr	Fabric filter	FF-14b	PM-10	New Source Review Permit May 4, 2011
ES-14c	NA	Sorbent Transfer Conveyor	12 tons/hr	Full enclosure or equivalent	NA	PM-10	New Source Review Permit May 4, 2011
ES-14d	NA	S-Sorb Transfer Conveyor	12 tons/hr	Full enclosure or equivalent	NA	PM-10	New Source Review Permit May 4, 2011

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Emergency Combustion Turbine:							
IS-2	IS-2	Solar Turbines Inc. Combustion Turbine Emergency Generator (pre-2006)	4.7×10^6 Btu/hr		NA		State Operating Permit July 18, 2012
Emergency Diesel Generators							
IS-38	IS-38	Cummins Emergency Diesel Generator (2007)	317 hp		NA		Exemption Letter January 23, 2009
Quench Water Pump - 5	QWP-5	Cummins Emergency Diesel Quench Water Pump (October, 2006)	152 hp	NA	NA		NA
Quench Water Pump - 6	QWP-6	Cummins Emergency Diesel Quench Water (October, 2006)	152 hp	NA	NA		NA
EDG -78	EDG-78	Cummins Emergency Diesel Generator (1993)	750 hp	NA	NA		NA
Other Fuel Burning Equipment:							
Fire Pump - 6	FP-6	John Deere Fire Pump (2007)	290 hp	NA	NA		NA
IS-30	TSH	Thaw Shed Heaters (quantity 140) (propane)	0.275 mmBtu/hr (each)	NA	NA		NA

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
IS-4	IS-4	Thermoflux Inc. pipeline heater (natural gas) 1993	4.25 mmBtu/hr	NA	NA		NA
Degreasing Operation:							
IS-45	NA	Non-Halogenated Cold Solvent Degreasers	Various	NA	NA	VOC	NA

*The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

III. The Fuel Burning Equipment Requirements: Boilers – (Emission Unit ID# ES-3, ES-4, ES-5, ES-6)

A. Limitation Requirements for Emission Unit ID # ES-3, ES-4, ES-5, ES-6

Unit 3

1. Particulate emissions from boiler three (3) shall be controlled by an electrostatic precipitator. The electrostatic precipitator shall be provided with adequate access for inspection.
(9 VAC 5-80-490 B & C and Condition No. 2 of the 07/18/12 SOP)

2. At such time that Unit 3 is connected to the common FGD system, the FGD system shall maintain a 30-Day Rolling Average Removal Efficiency of 95 % for SO2. Compliance with this requirement shall be determined in accordance with the October 10, 2003 Consent Decree.
(Paragraph 114 of the 10/10/2003 Consent Decree and Condition No. 26 of the 7/18/2012 SOP)

3. The 1,155 x 10^6 Btu/hr boiler (Emission Unit ID# ES-3) shall consume no more than 404,712 tons/yr of coal at an annual average heating value of 12,500 Btu/lbs, or the number of tons which produce the same total heat input at a different heating value. The 154 X 10^6 Btu/hr startup and flame stabilization burners shall consume no more than 9,636 X 10^3 gallons/yr of oil at an average heating value of 140,000 Btu/gal or the number of gallons which will produce the same total heat input at a different heating value. Each fuel throughput shall be calculated as the sum of each consecutive 12 month period.
(9 VAC 5-80-490 B & C and Condition No. 3 of the 07/18/12 SOP)

4. Emissions from the operation of unit three (3) shall not exceed the limits specified below:

TSP[1]	0.1 lbs/10^6 Btu**	115.5 lbs/hr	505.9 tons/yr
PM10[1]	0.1 lbs/10^6 Btu**	115.5 lbs/hr	505.9 tons/yr
SO2[2]	2.64 lbs/10^6 Btu	3,049.2 lbs/hr**	13,355.5 tons/yr
NO2[3]	0.524 lbs/10^6 Btu	605.2 lbs/hr	2,650.9 tons/yr
CO[3]		25.5 lbs/hr*	111.8 tons/yr
VOC[3]		2.8 lbs/hr	12.1 tons/yr
Pb[3]		0.06 lbs/hr	0.25 tons/yr

* CO emissions are based on a combination of oil and coal firing. All other emissions are based on the boiler firing coal only.

** Compliance standard.

1. Particulate and PM-10 emissions limits may change in accordance with an approved emissions allocation plan meeting the requirements of 9 VAC 5-40-910 of State Regulations.
2. Sulfur dioxide emissions for each unit may vary in accordance with 9 VAC 5-40-930 of State Regulations.

3. Emissions are included for inventory purposes.

(9 VAC 5-80-490 B & C and Condition No. 4 of the 07/18/12 SOP)

Unit 4

5. Particulate emissions from the boiler four (4) shall be controlled by an electrostatic precipitator. The electrostatic precipitator shall be provided with adequate access for inspection.
(9 VAC 5-80-490 B & C and Condition No. 5 of the 07/18/12 SOP)

6. At such time that Unit 4 is connected to the common FGD system, the FGD system shall maintain a 30-Day Rolling Average Removal Efficiency of 95 % for SO2. Compliance with this requirement shall be determined in accordance with the October 10, 2003 Consent Decree.
(Paragraph 114 of the 10/10/2003 Consent Decree and Condition No. 27 of the 7/18/2012 SOP)

7. The permittee shall install a selective catalytic reduction control device (SCR) on Unit 4 no later than January 1, 2013 and commencing on that date and continuing thereafter, operate the SCR to meet a 30-Day Rolling Average Emission Rate of NOx of 0.100 lb/mmBTU for Unit 4.
(Paragraph 56 of the the 10/10/2003 Consent Decree and 9 VAC 5-80-490)

8. The 1,761 x 10^6 Btu/hr boiler (Emission Unit # ES-4) shall consume no more than 617,054 tons/yr of coal at an annual average heating value of 12,500 Btu/lb, or the number of tons which will produce the same total heat input at a different heating value. The 154 X 10^6 Btu/hr startup burner and flame stabilization burners shall consume no more than 9,636 X 10^3 gallons/yr of oil at an annual average heating value of 140,000 Btu/gal, or the number of gallons which will produce the same total heat input at a different heating value. Each fuel throughput shall be calculated as the sum of each consecutive 12 month period.
(9 VAC 5-80-490 B & C and Condition No. 6 of the 07/18/12 SOP)

9. Emissions from the operation of unit four (4) shall not exceed the limits specified below:

TSP[1]	0.1	lbs/10^6 Btu**	176.1 lbs/hr	771.3	tons/yr
PM10[1]	0.1	lbs/10^6 Btu**	176.1 lbs/hr	771.3	tons/yr
SO2[2]	2.64	lbs/10^6 Btu	4,649.0 lbs/hr**	20,362.8	tons/yr
NO2[3]	0.498	lbs/10^6 Btu	877.0 lbs/hr	3,841.2	tons/yr
CO[3]			37.6 lbs/hr*	164.9	tons/yr*
VOC[3]			4.2 lbs/hr	18.5	tons/yr
Pb[3]			0.09 lbs/hr	0.38	tons/yr

* CO emissions are based on a combination of oil and coal firing. All other emissions are based on the boiler firing coal only.

** Compliance standard.

1. Particulate and PM-10 emissions limits may change in accordance with an approved emissions allocation plan meeting the requirements of 9 VAC 5-40-910 of State Regulations.

2. Sulfur dioxide emissions for each unit may vary in accordance with 9 VAC 5-40-930 of State Regulations.

3. Emissions are included for inventory purposes.

(9 VAC 5-80-490 B & C and Condition No. 7 of the 07/18/12 SOP)

Unit 5

10. Particulate emissions from boiler five (5) shall be controlled by an electrostatic precipitator. The electrostatic precipitator shall be provided with adequate access for inspection.
(9 VAC 5-80-490 B & C and Condition No. 8 of the 07/18/12 SOP)

11. The permittee shall install a selective catalytic reduction control device (SCR) on Unit 5 no later than January 1, 2012 and commencing on that date and continuing thereafter, operate the SCR to meet a 30-Day Rolling Average Emission Rate of NOx of 0.100 lb/mmBTU for Unit 5.
(Paragraph 56 of the 10/10/2003 Consent Decree and 9 VAC 5-80-490)

12. The 3,604 x 10^6 Btu/hr boiler shall consume no more than 1,262,841.6 tons/yr of coal at an annual average heating value of 12,500 Btu/lb, or the number of tons which will produce the same total heat input at a different heating value. The 246.4 X 10^6 Btu/hr startup and flame stabilization burners shall consume no more than 15,418 X 10^3

gallons/yr of oil at an annual average heating value of 140,000 Btu/gal, or the number of gallons which will produce the same total heat input at a different heating value. The Atomizing Oil Gun Injector shall consume no more than 540,000 gallons of used oil per year. Each fuel throughput shall be calculated as the sum of each consecutive 12 month period.
(9 VAC 5-80-490 B & C and Condition No. 9 of the 07/18/12 SOP)

13. Emissions from the operation of unit five (5) shall not exceed the limits specified below:

TSP[1]	0.1	lbs/10^6 Btu**	360.4	lbs/hr	1,578.6	tons/yr
PM10[1]	0.1	lbs/10^6 Btu**	360.4	lbs/hr	1,578.6	tons/yr
SO2[2]	2.64	lbs/10^6 Btu	9,514.6	lbs/hr**	41,673.8	tons/yr
NO2[3]	0.589	lbs/10^6 Btu	2,122.8	lbs/hr	9,297.7	tons/yr
CO[3]			76.0	lbs/hr*	332.7	tons/yr*
VOC[3]			8.7	lbs/hr	37.9	tons/yr
Pb[3]			0.18	lbs/hr	0.77	tons/yr

* CO emissions are based on a combination of oil and coal firing. All other emissions are based on the boiler firing coal only.

** Compliance standard.

1. Particulate and PM-10 emissions limits may change in accordance with an approved emissions allocation plan meeting the requirements of 9 VAC 5-40-910 of State Regulations.

2. Sulfur dioxide emissions for each unit may vary in accordance with 9 VAC 5-40-930 of State Regulations.

3. Emissions are included for inventory purposes.

(9 VAC 5-80-490 B & C and Condition No. 10 of the 07/18/12 SOP)

Unit 5 Used Oil Requirements:

14. Except as specified in this permit, the Atomizing Oil Gun Injector is to be installed and operated as represented in the permit application dated February 4, 1993. Any changes in the permit application specifications or any existing facilities which alter the impact of the facility on air quality may require a permit. Failure to obtain such a permit prior to construction may result in enforcement action.
(9 VAC 5-80-490 B & C and Condition No. 11 of the 07/18/12 SOP)

15. Used oil shall only be injected into Unit five (5) when the boiler is operating at or below 360 Megawatts gross. Unit generation shall be recorded in Megawatts during used oil injection.
(9 VAC 5-80-490 B & C and Condition No. 12 of the 07/18/12 SOP)

16. The approved fuel for the oil gun injector is used oil that meets all of the following specification levels:

Arsenic	5 ppm maximum, by weight
Cadmium	2 ppm maximum, by weight
Chromium	10 ppm maximum, by weight
Lead	100 ppm maximum, by weight
Total Halogens	1,200 ppm maximum, by weight
PCB	49 ppm maximum, by weight
Flash Point	100° F minimum

A change in the fuel may require a permit to modify and operate.

(9 VAC 5-80-490 B & C and Condition No. 13 of the 07/18/12 SOP)

17. The permittee shall certify the used oil fuel composition prior to initial usage of the oil gun injector and as described in Condition 16. The certification shall be by a laboratory analysis conducted in accordance with EPA Publication SW-846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" and in accordance with testing methods required by the Virginia Hazardous Waste Management Regulations.

On-site Oil: For used oils generated on-site, the analysis shall consist of a composite of random samples taken from each collection storage tank or pit. The analysis shall be conducted monthly. DEQ will allow quarterly testing, if the test data shows there is no violation of the standard. Each certification of on-site used oil shall include the following:

a. the date of each test

b. copies of the laboratory analyses indicating the content of Arsenic, Cadmium, Chromium, Lead, Total Halogens, and PCB within the oil in ppm, by weight

c. documentation of the used oil analysis indicating the locations from which the samples were taken

d. the analytical method used, and

e. statement from the owner or operator that the analyzed fuels are representative of the fuel burned in the permitted equipment.

Off-site Oil: For used oils transported to this site from other Virginia Power locations, the analyses shall include sampling and analysis representative of each shipment of used oil. Each certification of off-site used oil shall include the following:

a. the name of the fuel supplier or source
b. the date on which the oil was received
c. the volume of oil delivered in the shipment
d. copies of the laboratory analyses indicating the content of Arsenic, Cadmium, Chromium, Lead, Total Halogens, and PCB within the oil in ppm, by weight
e. dates fuel analyses were performed
f. documentation of the used oil analysis indicating the location of the oil when the samples were taken
g. the analytical method used

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.
(9 VAC 5-80-490 B & C, 9 VAC 5-80-490 F and Condition No. 15 of the 07/18/12 SOP)

18. The sulfur content of the used oil to be burned in Unit (5) five shall not exceed 1.0 percent by weight. The annual average of the sulfur content of the used oil to be burned in the coal-fired boiler Unit (5) five shall not exceed 0.5 percent by weight, calculated as follows:

$$\frac{\sum_{n=1}^{12} (\text{gal oil burned in month n} \times \text{sulfur content in month n})}{\sum_{n=1}^{12} (\text{gal oil burned in month n})}$$

where n=1 to 12 is the present month and the preceding 11 months.

The permittee shall certify the fuel Sulfur content by a laboratory analysis conducted in accordance with accepted industry standards. For used oils generated on-site, the analysis shall consist of a composite of random samples taken from each collection storage tank or pit. The analysis shall be conducted on a monthly basis. DEQ will allow quarterly testing, if the test data shows there is no violation of the standard. For used oils transported to this site from other Virginia Power locations, the analysis shall include sampling and analyses representative of each shipment of used oil. Each certification of off-site used oil shall include the following:

a. the name of the fuel supplier or source

b. the date on which the oil was received

c. the volume of used oil delivered in the shipment

d. documentation of the oil analysis indicating the location of the oil when the sample was received

e. the sulfur content of the oil including an indication of the method used to determine the Sulfur content in the oil

These records shall be available for inspection by the DEQ and shall be current for the most recent five (5) years.
(9 VAC 5-80-490 B & C, 9 VAC 5-80-490 F and Condition No. 16 of the 07/18/12 SOP)

19. Emissions from the operation of the oil gun shall not exceed the limits specified below:

Total Suspended Particulate (including PM_{10})	21.4	lbs/hr	10.7	tons/yr
PM_{10}	17.9	lbs/hr	9.0	tons/yr
Sulfur Dioxide	79.4	lbs/hr	19.9	tons/yr
Nitrogen Oxides (as NO_2)	10.3	lbs/hr	5.1	tons/yr
Carbon Monoxide	2.7	lbs/hr	1.4	tons/yr
Volatile Organic Compounds	0.1	lbs/hr	0.1	tons/yr
Lead Compounds	0.3	lbs/hr	0.2	tons/yr
Arsenic Compounds	0.02	lbs/hr	0.01	tons/yr
Cadmium Compounds	0.008	lbs/hr	0.004	tons/yr
Chromium Compounds	0.04	lbs/hr	0.02	tons/yr
Chlorine	4.6	lbs/hr	2.3	tons/yr
Hydrochloric Acid (HCl)	4.0	lbs/hr	2.0	tons/yr
Hydrogen Fluoride	4.6	lbs/hr	2.3	tons/yr
Polychlorinatedbiphenyls (as chlorodiphenyl)	0.2	lbs/hr	0.1	tons/yr

(9 VAC 5-80-490 B & C and Condition No. 17 of the 07/18/12 SOP)

20. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Director, Piedmont Regional Office. These records shall include, but are not limited to:

    a. Monthly consumption of used oil

    b. annual consumption of used oil, calculated as the sum of each consecutive 12-month period

    c. unit generation, in megawatts (gross), during all periods of used oil injection, tabulated on an hourly basis and indicating associated used oil consumption

    d. annual tabulation of unit generation showing all periods of used oil injection and associated used oil consumption

    e. fuel specification certifications

    f. fuel Sulfur content certifications

    g. amount of oil delivered from other Virginia Power facilities

    These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.
    (9 VAC 5-80-490 F and Condition No. 18 of the 07/18/12 SOP)

Unit 6

21. Particulate emissions from boiler six (6) shall be controlled by a fabric filter. The fabric filter shall be provided with adequate access for inspection.
    (9 VAC 5-80-490 B & C and Condition No. 19 of the 07/18/12 SOP)

22. The permittee shall install a selective catalytic reduction control device (SCR) on Unit 6 no later than January 1, 2011 and commencing on that date and continuing thereafter, operate the SCR to meet a 30-Day Rolling Average Emission Rate of NOx of 0.100 lb/mmBTU for Unit 5.
    (Paragraph 56 of the 10/10/2003 Consent Decree and 9 VAC 5-80-490)

23. Sulfur dioxide emissions from boiler six (6) shall be controlled by a flue gas desulfurization device (FGD). The FGD shall be provided with adequate access for inspection.
    (Paragraphs 64, 66 of the 10/10/2003 Consent Decree)

24. The 6650 X 10^6 Btu/hr boiler shall consume no more than 2,330,160 tons/yr of coal at an annual average heating value of 12,500 Btu/lbs, or the number of tons which produce the same total heat input at a different heating value. The 358.4 X 10^6 Btu/hr startup and flame stabilization burners shall consume no more than 22,426 X 10^3 gallons/yr of oil at an annual average heating value of 140,000 Btu/gal, or the number

of gallons which will produce the same total heat input at a different heating value. Each fuel throughput shall be calculated as the sum of each consecutive 12 month period.
(9 VAC 5-80-490 B & C and Condition No. 20 of the 07/18/12 SOP)

25. Emissions from the operation of unit six (6) when burning coal shall not exceed the limits specified below:

TSP[1]	0.1	lbs/10^6 Btu**	665.0 lbs/hr	2,912.7 tons/yr
PM10[1]	0.1	lbs/10^6 Btu**	665.0 lbs/hr	2,912.7 tons/yr
SO2[2]	2.64	lbs/10^6 Btu	17,556.0 lbs/hr**	76,895.3 tons/yr
NO2[3]	0.616	lbs/10^6 Btu	4,096.4 lbs/hr	17,942.2 tons/yr
CO[3]			138.6 lbs/hr*	607.2 tons/yr*
VOC[3]			16.0 lbs/hr	69.9 tons/yr
Pb[3]			0.33 lbs/hr	1.43 tons/yr

* CO emissions are based on a combination of oil and coal firing. All other emissions are based on the boiler firing coal only.

** Compliance standard.

1. Particulate and PM-10 emissions limits may change in accordance with an approved emissions allocation plan meeting the requirements of 9 VAC 5-40-910 of State Regulations.

2. Sulfur dioxide emissions for each unit may vary in accordance with 9 VAC 5-40-930 of State Regulations.

3. Emissions are included for inventory purposes.

(9 VAC 5-80-490 B & C and Condition No. 21 of the 07/18/12 SOP)

Units 3, 4, 5 and 6

26. Visible emissions from Unit 6 and the common FGD system shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60 percent opacity. Visible emissions shall be determined as indicated by EPA Method 9 (reference: 40 CFR Part 60, Appendix A) or by a continuous opacity monitor.
(9 VAC 5-80-490 B & C and Condition No. 23 of the 07/18/12 SOP)

27. Except where this permit is more restrictive than the applicable requirement, Units 3, 4, 5 and 6 shall be operated in compliance with the applicable requirements of 40 CFR 63 Subpart UUUUU.
(9 VAC 5-80-490 B & C, 40 CFR 63 Subpart UUUUU)

B. Monitoring and Recordkeeping Requirements for Emission Unit ID # ES-3, ES-4, ES-5, ES-6

28. Continuous emission monitors shall be installed to measure and record opacity. The opacity monitor for Unit 6 shall be located in the ductwork. The opacity monitors for the common FGD system shall be located in the ductwork of each unit (Units 3, 4 and 5) or in the ductwork for the common FDG system. The monitors shall be maintained, located, and calibrated in accordance with the requirements listed in 9 VAC 5-40-40 and 9 VAC 5-40-50.
(9 VAC 5-80-490 E and Condition No. 22 of the 07/18/12 SOP)

29. Compliance with sulfur dioxide emission limits from the coal fired boilers shall be determined by continuous emissions monitoring systems meeting the requirements of 40 CFR 60. Compliance with the sulfur dioxide standard shall be determined by a 30 day rolling average.
(9 VAC 5-80-490 E and Condition No. 24 of the 07/18/12 SOP)

30. Continuous monitors shall be installed to measure and record nitrogen dioxide emissions. The nitrogen dioxide monitors shall be maintained, located, and calibrated in accordance with the requirements listed in 40 CFR 75.
(9 VAC 5-80-490 E and 40 CFR 72.9)

31. Continuous monitors shall be installed to measure and record the volumetric flow. The volumetric flow monitors shall be maintained, located, and calibrated in accordance with the requirements listed in 40 CFR 75.
(9 VAC 5-80-490 E and 40 CFR 72.9)

32. The common duct COMS, serving Units 3, 4, and 5, shall be operated to capture a minimum of 95% of the opacity data in each quarterly operating period. Operating time for the purpose of this condition is defined as when the unit(s) are in operation, any of the induced draft fans are activated, or both.

    a. The data capture rate shall include both operating time and downtime for all causes (e.g., monitor malfunctions, data system failures, out of control periods, or any other unknown causes).

    b. Downtime associated with monitor maintenance, QA/QC activities, and routine zero and span checks shall not be considered in data capture calculations.

c. Within 45 days following certification of the common duct COMS, the permittee shall develop a schedule of preventive maintenance for the monitor. The schedule shall be made available to the Department upon request.

d. In the event the common duct COMS fails to maintain a data capture rate of at least 95% during a quarterly operating period, the following shall apply:

i. The permittee shall submit the following information with the quarterly excess emissions statement:

1. A description of the cause of the missing data minutes; and

2. A description of immediate corrective actions that were taken.

ii. At the request of the Department, the permittee shall provide a description of long term corrective actions that have or will be taken. Corrective actions may include, but are not limited to, equipment, procedure, and maintenance improvements.

(40 CFR Part 60, Appendix B, Performance Specification 1), (40 CFR Part 60, Appendix F, Procedure 1), (9 VAC 5-40-40), (9 VAC 5-40-41), (9 VAC 5-40-50), (9 VAC 5-40-60), (9 VAC 5-40-100 and Condition No. 28 of the 7/18/2012 SOP)

33. The electrostatic precipitators on Units 3, 4, and 5 shall be equipped with monitoring devices that measure the primary voltage, secondary voltage, primary current, secondary current and spark rate for each field. The operating condition of each field shall be determined once per twelve (12) hour shift at a minimum. Any malfunctioning fields shall be noted and recorded. Any defects in the structural integrity of the precipitators shall be noted and recorded.
(9 VAC 5-80-490 E and Condition No. 25 of the 07/18/2012 SOP)

C. Testing Requirements for Emission Unit ID # ES-3, ES-4, ES-5, ES-6

34. The permitted facility shall be constructed so as to allow for emissions testing upon reasonable notice at any time using appropriate methods. Test ports shall be provided at the appropriate locations.
(9 VAC 5-50-40, 9 VAC 5-80-490 E & F and Condition No. 14 of the 07/18/12 SOP)

35. Performance testing shall be conducted for particulate from unit 3, 4, 5, and 6 using reference method 1 - 5, 17, 201 or 202. The performance test shall be used to determine compliance with the particulate emission limits contained in Conditions 4, 9, 13 and 25 and/or Article 8, Chapter 40 of State Regulations. The tests shall be performed, and reported within 36 months of the permit issuance or the Department will accept a test that has already been conducted providing that is was conducted within 24 months of permit issuance. Testing shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30, and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the tests are to be arranged with the Piedmont Region. The permittee shall submit

a test protocol at least 30 days prior to testing. Two copies of the test results shall be submitted to the Piedmont Region within 60 days after test completion and shall conform to the test report format enclosed with this permit.
(9 VAC 5-40-30 and 9 VAC 5-80-490 E & F)

D. Recordkeeping Requirements for Emission Unit ID # ES-3, ES-4, ES-5, ES-6

36. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Piedmont Region. The records shall include but are not limited to following:

    a. The monthly throughput of waste oil, the monthly throughput of distillate oil, the monthly throughput of coal, and

    b. All fuel supplier certifications, and

    c. Records of all oil and coal shipments purchased indicating the supplier, volume\weight of the shipment, and date on which the shipment was made, and all subsequent oil and coal analyses to include weight percent sulfur content, and

    d. Quarterly sulfur dioxide, nitrogen dioxide and excess opacity emissions reports.

    e. The records required in Conditions 29, 30, 34 and 36 shall be kept on site and made available upon request by the Department.

    These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.
    (9 VAC 5-80-900, 9 VAC 5-50-50, 9 VAC 5-80-490F and Condition No. 96 a, b and c of the 07/18/12 SOP)

E. Compliance Assurance Monitoring (CAM) for Emission Unit ID # ES-3, ES-4, ES-5, ES-6

37. Compliance Assurance Monitoring (CAM) - The permittee shall monitor, operate, calibrate and maintain the ESPs controlling Units ES-3, ES-4 and , ES-5 and shall monitor, operate, calibrate and maintain the baghouse controlling Unit ES-6 according to the following:

ESP Compliance Assurance (CAM) Plan
Units ES-3, ES-4, ES-5

Indicator	Indicator 1 Opacity	Indicator 2 Transformer Rectifiers
Measurement approach	Opacity is continuously monitored by a Continuous Opacity Monitoring System (COMS) for each unit (ES-3, ES-4 and ES-5). Continuous values are reduced to six-minute block averages.	Daily observation of each available[1] rectifier or rectifier alarm status by a qualified employee.

Indicator	Indicator 1 Opacity	Indicator 2 Transformer Rectifiers
Indicator range	Continuous operation between 0% and 20% opacity. An excursion is defined as average opacity greater than 20% during any five consecutive six-minute periods and any two consecutive 6 minute periods greater than 60% opacity. This excludes periods of startup, shutdown and malfunction.	An excursion is defined as a non-energized available rectifier or a rectifier alarm or failure to perform the daily inspection of the rectifier.
Performance criteria: **Verification of operational status**	COMS were installed in accordance with 40 CFR 60, Appendix B, Performance Specification 1 (PS-1).	Rectifier observations verify that adequate electrical power is supplied to the ESPs.
QA/QC practices and criteria	COMS were installed and evaluated in accordance with 40 CFR 60, Appendix B, PS-1. Zero and span drift are checked daily and filter audits are performed in accordance with PS-1. Filter audits are performed semiannually. .	ESPs are energized within 2 hours after commencement of combustion of any amount of coal (except when clearing out coal mills). Each available[1] portion of the ESP is fully energized and power levels delivered to the ESPs are maintained consistent with manufacturers' specifications, operational design of the equipment and good engineering practices. All startups and events for which the unit is on-line and the ESP is powered off are recorded.
Monitoring frequency and data collection procedure	Continuous for COMS. The opacity data are collected and retained by a computerized Data Acquisition And Handling System (DAHS).	Failures of the ESP equipment are recorded in an event log. For equipment failures that cannot be repaired the same day, best efforts are made to repair the element no later than the next available unit outage appropriate to the repair task. The log also includes a history of the actions taken to correct the problem and restore the equipment back to operation.

[1]**Available is defined as currently in service**

Baghouse Compliance Assurance Monitoring (CAM) Plan
Unit ES-6

Indicator	Indicator 1 Opacity	Indicator 2 Full Baghouse Differential Pressure
Measurement approach	Opacity is continuously monitored by a Continuous Opacity Monitoring System (COMS). Continuous values are reduced to six-minute block averages.	Continuously Monitor Differential pressure across the baghouse during normal operations.
Indicator range	Continuous operation between 0% and 20% opacity. An excursion is defined as average opacity greater than 20% during any five consecutive six-minute periods and any two consecutive 6 minute periods greater than 60% opacity. This excludes periods of startup, shutdown and malfunction.	An excursion is defined when the minimum pressure drop is less than 3.5 or greater than 8.5 inches of water column, This excludes periods of startup, shutdown and malfunction.
Performance criteria: **Verification of operational status**	COMS were installed in accordance with 40 CFR 60, Appendix B, Performance Specification 1 (PS-1)..	Differential Pressure observations verify that the pressure drop across the baghouse is within the normal range of 3.5 to 8.5 inches of water column. DP instrumentation indicates operational status.

Indicator	Indicator 1 Opacity	Indicator 2 Full Baghouse Differential Pressure
QA/QC practices and criteria	Zero and span drift are checked daily and filter audits are performed in accordance with PS-1. Filter audits are performed semiannually.	DP instrumentation calibrated according to manufacturer's specifications
Monitoring frequency and data collection procedure	Continuous for COMS. The opacity data are collected and retained by a computerized Data Acquisition And Handling System (DAHS).	Continuously monitored and displayed, results are recorded in a data acquisition system.

38. Compliance Assurance Monitoring (CAM) - The permittee shall conduct the monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 40 CFR 64.9.
(9 VAC 5-80-490 E and 40 CFR 64.6 (c))

39. Compliance Assurance Monitoring (CAM) - At all times, the permittee shall maintain the monitoring equipment, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
(9 VAC 5-80-490 E and 40 CFR 64.6 (b))

40. Compliance Assurance Monitoring (CAM) - Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that Units ES-3, ES-4, ES-5 and ES-6 is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by inadequate maintenance or improper operation are not malfunctions.
(9 VAC 5-80-490 E and 40 CFR 64.6 (c))

41. Compliance Assurance Monitoring (CAM) - Upon detecting an excursion or exceedance, the permittee shall restore operation of Units ES-3, ES-4, ES-5 and ES-6 (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup and shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without

operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator, designated condition, or below the applicable emission limitation or standard, as applicable.
(9 VAC 5-80-490 E and 40 CFR 64.7(d)(2))

42. Compliance Assurance Monitoring (CAM) - Determination that acceptable procedures were used in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.
(9 VAC 5-80-490 E and 40 CFR 64.7 (d)(2))

43. Compliance Assurance Monitoring (CAM) - If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director, Piedmont Regional Office and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
(9 VAC 5-80-490 E and 40 CFR 64.7 (e))

44. Compliance Assurance Monitoring (CAM) - If the number of exceedances or excursions exceeds 5 percent duration of the operating time for Units ES-3, ES-4, ES-5 and ES-6 for a semiannual reporting period, the permittee shall develop, implement and maintain a Quality Improvement Plan (QIP) in accordance with 40 CFR 64.8. If a QIP is required, the permittee shall have it available for inspection. The QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the permittee shall modify the plan to include procedures for conducting one or more of the following, as appropriate:

    a. Improved preventative maintenance practices;

    b. Process operation changes;

    c. Appropriate improvements to control methods;

    d. Other steps appropriate to correct control performance; and

    e. More frequent or improved monitoring.

(9 VAC 5-80-490 E and 40 CFR 64.8(a) and (b))

45. Compliance Assurance Monitoring (CAM) Recordkeeping – The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plant (QIP) required pursuant to section 64.8 and any activities undertaken to implement a quality improvement plan (QIP), and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).
(9 VAC 5-80-490 E and 40 CFR 64.9(b))

F. Consent Decree Requirements for Emission Unit ID# ES-3, ES-4, ES-5, ES-6

46. The Consent Decree entered by the United States District Court for the Eastern District of Virginia, Civil Action Nos. 03-CV-517-A and 03-CV-603-A, on October 10, 2003 between Virginia Electric and Power Company and the United States of America, et al. (the "Consent Decree"), as such Consent Decree might be amended or modified from time to time in accordance with its terms, is incorporated in its entirety into this permit by reference and is attached as Appendix B to this permit. The permittee's obligations under this permit shall be to comply with the terms and conditions of the Consent Decree that relate to the operation of Chesterfield Power Station exclusively, and such compliance shall be determined exclusively by reference to the terms and conditions of the Decree. Whenever any conflict or ambiguity arises between the Consent Decree and this permit, the terms and conditions of the Consent Decree control. Compliance with the monitoring, recordkeeping, reporting, testing and compliance certification requirements in the Consent Decree that relate to the operation of Chesterfield Power Station shall be deemed to satisfy the monitoring, recordkeeping, reporting, testing, and compliance certification requirements of this permit arising out of the terms and conditions of the Consent Decree.
(10/10/2003 Consent Decree)

47. Units 4, 5 and 6 shall operate with the SCR on a year-round basis and meet a 30-Day Rolling Average Emission Rate for NOx of 0.100 lb/mmBtu for each Unit. The permittee shall use best efforts to operate each SCR in accordance with manufacturer's specifications, good engineering practices, and facility operational and maintenance needs.
(9 VAC 5-80-490, Paragraphs 56, 57, and 58 of the 10/10/2003 Consent Decree)

48. The FGD for Unit 6 shall demonstrate at least 95 percent removal efficiency for SO_2 on a 30-Day Rolling Average basis.
(9 VAC 5-80-490, Paragraphs 64, 66 of the 10/10/2003 Consent Decree)

49. The FGD for Unit 5 shall demonstrate at least 95 percent removal efficiency for SO2 on a 30-Day Rolling Average basis.
(9 VAC 5-80-490, Paragraphs 64, 66 of the 10/10/2003 Consent Decree)

50. The permittee shall use best efforts to operate the FGDs at all times the Units the FGDs serve are in operation, provided that such FGD systems can be operated consistent with manufacturers' specifications, good engineering practices and the facility's operational and maintenance needs.
(Paragraph 69 of the 10/10/2003 Consent Decree)

51. The facility shall operate Chesterfield Units 3, 4, and 5 ESPs to maximize PM emission reductions through the procedures established in this Paragraph. (A) Commence operation no later than two hours after commencement of combustion of any amount of coal, and provided that, for all ESP-equipped units, "combustion of any amount of coal" shall not include combustion of coal that is the result of clearing out a Unit's coal mills as the Unit is returned to service. (B) Fully energize each available portion of each ESP, except those ESP fields that have been out of service since at least January 1, 2000, consistent with manufacturer' specifications, the operational design of the Unit, and good engineering practices, and repair such fields that go out of service consistent with the requirements of this Paragraph. (C) Maintain power levels delivered to the ESPs, consistent with manufacturers' specifications, the operational design of the Unit, and good engineering practices. (D) Continuously operate Chesterfield Units 3, 4, and 5 ESPs and Unit 6 baghouse in compliance with manufacturers' specifications, the operational design of the Unit, and good engineering practices. Whenever any element of any ESP that has been in service at any time since January 1, 2000 fails, does not perform in accordance with manufacturers' specifications and good engineering practices, or does not operate in accordance with the standards set forth in this Paragraph, the permittee shall use best efforts to repair the element no later than the next available Unit outage appropriate to the repair task.
(9 VAC 5-80-490, Paragraph 78 of the 10/10/2003 Consent Decree)

52. Unit 6 shall meet a PM emission limit of 0.030 lb/mmBtu. The 0.030 lb/mmBtu PM Emission Rate shall not apply during periods of "startup" and "shutdown" or during periods of control equipment or Unit malfunction, if the malfunction meets the requirements of the Force Majeure Section of this Consent Decree. Periods of "startup" shall not exceed two hours after any amount of coal is combusted. Periods of "shutdown" shall only commence when the Unit ceases burning any amount of coal. Coal shall not be deemed to be combusted if it is burned as a result of clearing out a Unit's coal mills as the Unit is returned to service.
(9 VAC 5-80-490, Paragraph 80 and 81 of the 10/10/2003Consent Decree))

53. Unit 5 shall meet a PM emission limit of 0.030 lb/mmBtu. The 0.030 lb/mmBtu PM Emission Rate shall not apply during periods of "startup" and "shutdown" or during periods of control equipment or Unit malfunction, if the malfunction meets the requirements of the Force Majeure Section of this Consent Decree. Periods of "startup" shall not exceed two hours after any amount of coal is combusted. Periods of "shutdown" shall only commence when the Unit ceases burning any amount of

coal. Coal shall not be deemed to be combusted if it is burned as a result of clearing out a Unit's coal mills as the Unit is returned to service.
(9 VAC 5-80-490, Paragraph 80 and 81 of the 10/10/2003Consent Decree)

54. Unit 4 shall meet a PM emission limit of 0.030 lb/mmBtu. The 0.030 lb/mmBtu PM Emission Rate shall not apply during periods of "startup" and "shutdown" or during periods of control equipment or Unit malfunction, if the malfunction meets the requirements of the Force Majeure Section of this Consent Decree. Periods of "startup" shall not exceed two hours after any amount of coal is combusted. Periods of "shutdown" shall only commence when the Unit ceases burning any amount of coal. Coal shall not be deemed to be combusted if it is burned as a result of clearing out a Unit's coal mills as the Unit is returned to service.
(9 VAC 5-80-490, Paragraphs 80 and 81 of the 10/10/2003 Consent Decree)

55. Unit 3 shall meet a PM emission limit of 0.030 lb/mmBtu. The 0.030 lb/mmBtu PM Emission Rate shall not apply during periods of "startup" and "shutdown" or during periods of control equipment or Unit malfunction, if the malfunction meets the requirements of the Force Majeure Section of this Consent Decree. Periods of "startup" shall not exceed two hours after any amount of coal is combusted. Periods of "shutdown" shall only commence when the Unit ceases burning any amount of coal. Coal shall not be deemed to be combusted if it is burned as a result of clearing out a Unit's coal mills as the Unit is returned to service.
(9 VAC 5-80-490, Paragraphs 80 and 81 of the 10/10/2003 Consent Decree)

56. VEPCO shall conduct a stack test for PM on each stack servicing each Unit's 3, 4, 5 and 6. Such PM Stack testing shall be conducted at least once per every four successive "QA Operating Quarters" (as defined in 40 CFR Section 72.2) and the results of such testing shall be submitted to the Plaintiffs as part of the periodic reporting.
(9 VAC 5-80-490, Paragraph 95 of the 10/10/2003 Consent Decree)

57. "30-Day Rolling Average Emission Rate" for a Unit (see Condition 47) means and is calculated by (A) summing the total pounds of the pollutant in question emitted from the Unit during an Operating Day and the previous twenty-nine (29) Operating Days; (B) summing the total heat input to the Unit in mmBTU during the Operating Day and during the previous twenty-nine (29) Operating Days; and (C) dividing the total number of pounds of pollutants emitted during the thirty (30) Operating Days by the total heat input during the thirty (30) Operating Days, and converting the resulting value to lbs/mmBTU. A new 30-Day Rolling Average Emission Rate shall be calculated for each new Operating Day. In calculating all 30-Day Rolling Average Emission Rates VEPCO:

A. shall include all emissions and BTUs commencing from the time the Unit is synchronized with a utility electric distribution system through the time that the Unit

ceases to combust fossil fuel and fire is out in the boiler, except as provided by Subparagraph B, C, or D;

B. shall use methodologies and procedures set forth in 40 C.F.R. Part 75;

C. may exclude emissions of NOx and BTUs occurring during the fifth and subsequent Cold Start Up Period(s) that occur in any 30-Day Rolling period if inclusion of such emissions would result in a violation of any applicable 30-Day Rolling Average Emissions Rate, and if VEPCO has installed, operated and maintained the SCR in question in accordance with manufacturers' specifications and good engineering practices. A "Cold Start Up Period" occurs whenever there has been no fire in the boiler of a Unit (no combustion of any fossil fuel) for a period of six hours or more. The emissions to be excluded during the fifth and subsequent Cold Start Up Period(s) shall be the less of (1) those NOx emissions emitted during the eight hour period commencing when the Unit is synchronized with a utility electric distribution system and concluding eight hours later or (2) those emitted prior to the time that the flue gas has achieved the SCR operational temperature as specified by the catalyst manufacturer; and

D. may exclude NOx emissions and BTUs occurring during any period of malfunction (as defined at 40 C.F.R. 60.2) of the SCR.

(9 VAC 5-80-490, Paragraph 5 of the 10/10/2003 Consent Decree)

58. "30-Day Rolling Average Removal Efficiency" means the percent reduction in SO_2 Emission Rate achieved by a Unit's FGD over a 30 Operating Day period (see Conditions 2, 6, 26, 27).
(9 VAC 5-80-490, Paragraph 6 of the 10/10/2003 Consent Decree)

59. Calculating 30-Day Rolling Average Removal Efficiency of a VEPCO System FGD. The SO_2 30-Day Rolling Average Removal Efficiency for a VEPCO System FGD shall be obtained and calculated using SO_2 CEMS data in compliance with 40 CFR Part 75 (from both the inlet and outlet of the control device) by subtracting the outlet 30-Day Rolling Average Emission Rate from the inlet 30-Day Rolling Average Emission Rate on each day the boiler operates, dividing that difference by the inlet 30-Day Rolling Average Emission Rate, and then multiplying by 100. A new 30-Day Rolling Average Removal Efficiency shall be calculated for each new Operating Day. In the case of FGDs serving Chesterfield Units 5 and 6 if any flue gas emissions containing SO_2 did not pass through the inlet of the Unit's scrubber on a day when the Unit operated, VEPCO must account for, report on, and include any such emissions in calculating the FGD Removal Efficiency for that day and for every 30-Day Rolling Average of which that day is a part.

(9 VAC 5-80-490, Paragraph 68 of the 10/10/2003 Consent Decree)

IV. Fuel Burning Equipment Requirements: Turbines (Emission Unit ID # ES-7 and ES-8)

A. Limitations for Emission Unit ID # ES-7 and ES-8

60. Construction and operation of the two (2) combustion turbines shall be constructed as proposed in the permit application dated February 11, 1987. No changes in the permit applications specifications or any existing facilities shall be made which alter the emissions into the ambient air or alter the impact of the facility on air quality without the prior written approval of the Board. The permit application and supporting documents (ADDENDUM A) are a part of this permit.
(9 VAC 5-80-490 B & C, 9 VAC 5-170-160 and Condition No. 29 of the 07/18/12 SOP)

61. The approved fuels for each unit are natural gas, No. 2 fuel oil and coal gas. A change in the fuel may require a permit to modify and operate. Each combustion turbine shall consume no more than 14,793 x 10^6 cubic feet of natural gas, 104.54 x 10^6 gallons of No. 2 oil, or 2,157.5 x 10^6 pounds coal gas per year, based on the following heating values (HHV) and densities: natural gas, 23,000 Btu per pound, 0.04515 pounds per cubic feet; distillate oil, 19,663 Btu per pound, 7.105 pounds per gallon; and coal gas, 6,639 Btu per pound.
(9 VAC 5-80-490 B & C, 9 VAC 5-80-20, 9 VAC 5-170-160 and Condition No. 30 of the 07/18/12 SOP)

62. Emissions from the operation of each unit at full load shall not exceed the limitations specified below :

TSP	73 tons/yr
SO2	2,233 tons/yr
CO	544 tons/yr
Lead	0.134 tons/yr

(9 VAC 5-50-270 and 9 VAC 5-50-280 and Condition No. 31 of the 07/18/12 SOP)

63. Short-term emission limits from the operation of each unit shall not exceed the following (except during periods of startup and shutdown):

Particulate Matter	0.11 lb/mmBtu	19 lb/hr
Sulfur Dioxide	0.33 lb/mmBtu	572 lb/hr
Carbon Monoxide		140 lb/hr
Volatile Organic Cmpds	0.0103 lb/mmBtu	17.5 lb/hr

Lead		0.0338 lb/hr	
Nitrogen Oxides (as NO2)			
-burning natural gas	42 ppmvd (@15% O2)	260 lb/hr (at ISO Conditions)	
- burning coal gas	77 ppmvd (@15% O2)	432 lb/hr (at ISO Conditions)	
-burning#2fueloil	<0.015% FBN (@15% O2)	65 ppmvd (at ISO Conditions)	413 lb/hr
	>0.015% FBN (@15% O2)	77 ppmvd (at ISO Conditions)	490

A "startup" is defined as the period commencing with ignition of the unit and consisting of two (2) hours of continuous emission monitoring system (CEMS) data. A "shutdown" is defined as the period comprising the final two (2) hours of CEMS data prior to the time when no fuel is being combusted.
"Short term emission limits" represent averages for a one-hour average period for PM, SO2, CO, VOC and lead. "Short term emission limits" represent a four-hour rolling average for NOx.
The exemption of emissions during startup and shutdown applies only to the lb/hr limit and ppm state limits of NOx in the permit, but not to the ppm limits set forth in the NSPS 40 CFR 60 Subpart GG. The permit does not exclude the permittee from meeting the NOx requirements in the NSPS, 40 CFR 60, Subpart GG, for startup and shutdown. The permittee is subject to all requirements of NSPS 40 CFR 60, Subpart GG. The NSPS at 60.334 (j) states that excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction.
Injection at "maximum moisturization" has been determined as BACT for NOx emissions from this source.
(9 VAC 5-50-270 and 9 VAC 5-50-280 and Condition No. 33 of the 07/18/12 SOP)

64. Visible emissions from Unit (7) and (8) shall not exceed 20 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A), except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity. This condition applies at all times except during startup, shutdown and malfunction.
(9 VAC 5-50-80, 9 VAC 5-80-490 B & C and Condition No. 32 of the 07/18/12 SOP)

65. Non-criteria pollutant emissions (beryllium, mercury, arsenic, fluorides, radon - 222, radionuclides and sulfuric acid mists) from the operation of each unit shall be limited by not exceeding the fuel usage under Condition 61. A change in the amounts of these pollutants emitted and/or a change in your facility which results in additional non-criteria pollutants to be emitted may require a permit to modify and operate. Units (7) and (8) shall operate in compliance with Rules 4-3 and 5-3, Non-Criteria Pollutants. No changes in the facility that alter emissions of any non-criteria pollutant

or cause the emission of additional non-criteria pollutants shall be made without the prior written approval of the Board.
(9 VAC 5-40-200, 9 VAC 5-50-200, 9 VAC 5-50-270 and Condition No. 34 and 41 of the 07/18/12 SOP)

66. Nitrogen oxide emissions from each unit shall be controlled by steam injection. The steam injection system shall be provided with adequate access for inspection. The maximum fuel-bound nitrogen content of the fuel to be burned in each unit shall not exceed 0.015 percent by weight of natural gas and coal gas and 0.05 percent by weight of No. 2 oil.
(9 VAC 5-80-490 B & C and Condition No. 35 of the 08/32/10 SOP)

67. Sulfur dioxide (SO_2) emissions from Units (7) seven and (8) eight shall be controlled by limiting sulfur content of fuel. The maximum sulfur content of the fuel shall not exceed 0.3 percent by weight.
(9 VAC 5-80-490 B & C and Condition No. 36 of the 07/18/12 SOP and 40 CFR 60 Subpart GG)

68. Carbon monoxide, total suspended particulates, and hydrocarbons emissions from each unit shall be controlled by equipment design for efficient combustion.
(9 VAC 5-80-490 B & C and Condition No. 37 of the 07/18/12 SOP)

69. Virginia Power shall meet all the applicable requirements of 40 CFR 60 Subpart GG - Standards of Performance for Stationary Gas Turbines.
(9 VAC 5-80-490 B & C and Condition No. 44 of the 07/18/12 SOP)

B. Monitoring Requirements for Emission Units ID # ES-7 and ES-8

70. A continuous monitoring system shall be installed to monitor and record the fuel consumption and the ratio of steam to fuel being fired in the turbines. It shall be maintained and calibrated in accordance with manufacturer's specifications. (9 VAC 5-80-490 E and Condition No. 39 of the 07/18/12 SOP and 40 CFR 60 Subpart GG)

71. A continuous emissions monitoring system (CEMS) shall be installed, maintained and operated to measure and record the emissions of nitrogen oxides from each unit. A diluent monitor (O2 or CO2) shall be co-located with each nitrogen oxide concentration monitor.

    The CEMS shall be installed, maintained, calibrated and operated in accordance with the performance specifications and test procedures (as applicable) identified in 40 CFR 75, Appendices A and B (except that bias adjustment of valid hourly data, and data substitution for monitor downtown will not be used).

The quality assurance of data generated by the CEMs shall be demonstrated by implementing or exceeding the minimum requirements for CEMs quality assurance as defined in 40 CFR 75, Appendix B.
(9 VAC 5-80-490 B & C, and 40 CFR 60, Subpart GG and Condition No. 40 of the 07/18/12 SOP)

72. Virginia Power shall monitor the sulfur and nitrogen content of the fuel being fired in the turbines in accordance with 40 CFR 60, Subpart GG.
(9 VAC 5-80-490 E and Condition No. 42 of the 07/18/12 SOP and 40 CFR 60 Subpart GG)

C. Reporting Requirements for Emission Units ID # ES-7 and ES-8

73. Virginia Power shall submit excess emissions reports for sulfur dioxide, nitrogen dioxide, ice fog and emergency fuel as required in 40 CFR 60, Subpart GG . The reports shall be submitted in writing to the Board (Director, Piedmont Regional Office) quarterly or semiannually beginning the third month after the start of the operation.
(9 VAC 5-50-410, 9 VAC 5-80-490 E and Condition No. 43 of the 07/18/12 SOP and 40 CFR 60 Subpart GG)

D. Testing Requirements for Emission Units ID # ES-7 and ES-8

74. In order to facilitate continuing compliance measurements, test ports shall be provided at the permanent stack or duct work for each unit. The permitted facility shall be designed and constructed so as to allow emissions testing using the methods prescribed upon reasonable notice at any time.
(9 VAC 5-40-30, 9 VAC 5-80-490 E & F, 9 VAC 5-50-30, 9 VAC 5-60-30, 9 VAC 5-80-70 and Condition No. 38 of the 07/18/12 SOP and 40 CFR 60 Subpart GG)

E. Recordkeeping Requirements for Emission Units ID # ES-7 and ES-8

75. Virginia Power shall retain records of all emission data and operating parameters required to be monitored for turbine (7) seven and (8) eight. These records shall be maintained by the source for a period of at least two (2) years.
These records shall include but are not limited to the following:

    a. The monthly throughput of natural gas, the monthly throughput of distillate oil and the monthly throughput of coal gas.

    (9 VAC 5-50-50, 9 VAC 5-80-490 F and Condition No. 46 of the 07/18/12 SOP)

76. Approval of Conditions 60 to 76 is only applicable to the permit requirements of the State Air Pollution Control Board and does not alter permit requirements by any other local, state, or federal government agency. Virginia Power is cautioned that approval of this permit should not be construed to mean its operation is automatically in compliance with all aspects of the Regulations for the Control and Abatement of Air Pollution. The Department of Environmental Quality personnel will be constantly

evaluating all sources for compliance with Part V, 9 VAC 5-50-80 - Standard for Visible Emissions, 9 VAC 5-50-90 - Standard for Fugitive Dust/Emissions, and 9 VAC 5-50-140 - Standard for Odorous Emissions. Compliance with all air pollution regulations must be a continuing, full time effort.
(9 VAC 5-80-490 F and Condition No. 50 of the 07/18/12 SOP and 40 CFR 60 Subpart GG)

V. Process Equipment Requirements: Coal Handling Equipment – (Emission unit ID# ES-9a, ES-9a(VF), ES-9c, ES9c (R) , ES-9c (S), ED-9c (T), ES-9c (P-1), ES-9c (C-1), ES-9c (CS-1), ES-9d, ES-9e, ES-9f

A. Limitations for Units ID# ES-9a, ES-9a(VF), ES-9c, ES9c (R) , ES-9c (S), ED-9c (T), ES-9c (P-1), ES-9c (C-1), ES-9c (CS-1), ES-9d, ES-9e, ES-9f

77. Particulate emissions from the coal crushers (ES-9e, ES-9f) shall be controlled by a full enclosure. The full enclosure shall be provided with adequate access for inspection.
(9 VAC 5-80-490 B & C and Condition No. 3 of the 01/08/04 NSR Permit)

78. The full enclosures (on ES-9e and ES-9f) shall maintain a control efficiency of no less than 95% of PM and 90% of PM10.
(9 VAC 5-80-490 B & C and Condition No. 4 of the 01/08/04 NSR Permit)

79. Particulate emission from the coal segregation equipment shall be controlled as follows:

Transfer Point Description	Method of Controls
Dozer Trap to Conveyor T (ES-9c(T))	Total Enclosure
Conveyor T (ES-9c(T)) to Conveyor R (ES-9c(R))	Wet Spray
Coal Pile (ES-9d) to Conveyor R (ES-9c(R))	Wet Spray
Conveyor R (ES-9c(R) to Conveyor P (ES-9c (P-1))	Wet Spray
Conveyor R (ES-9c(R)) to Conveyor F	Wet Spray
Feeder S (ES-9c (S)) to Conveyor F	Total Enclosure
Feed Plow P-1 (ES-9c(P-1)) to Conveyor C-1 (ES-9c (C-1))	Partial Enclosure
Conveyor C-1(ES-9c (C-1)) to Stacker CS-1(ES-9c (CS-1))	Partial Enclosure and Wet Spray
Stacker CS-1(ES-9c (CS-1)) to Coal Pile (ES-9d)	Partial Enclosure

All emission controls shall be provided with adequate access for inspection
(9 VAC 5-50-260, Condition 3 of 6/13/2008 minor NSR)

80. Fugitive dust and fugitive emissions controls shall include the following, or equivalent, as a minimum:

    a. Dust from material handling, screens, transfers, and load-outs, shall be controlled by wet suppression or equivalent (as approved by DEQ).

    b. All material being stockpiled shall be kept adequately moist to control dust during storage and handling or covered at all times to minimize emissions.

    c. Dust from haul roads and traffic areas shall be controlled by the application of asphalt, water, suitable chemicals, or equivalent methods approved by the DEQ.

    d. Reasonable precautions shall be taken to prevent deposition of dirt on public roads and subsequent dust emissions. Dirt, product, or raw material spilled or tracked onto paved surfaces shall be promptly removed to prevent particulate matter from becoming airborne.

    (9 VAC 5-80-490 B & C, 9 VAC 5-50-90 and Condition No. 5 of the 01/08/04 NSR Permit and condition 4 of the 06/13/2008 NSR Permit)

81. The yearly throughput of coal to the two (2) coal crushers (Unit ID ES-9e, ES-9f) shall not exceed 4,614,768 tons, calculated as the sum of each consecutive 12 month period.
    (9 VAC 5-80-490 B & C, 5-80-110 and Condition No. 57 of the 07/18/12 SOP)

82. Emissions from the operation of each coal crusher (Unit ID ES-9e and ES-9f) shall not exceed the limitations specified below:

Particulate Matter	3.6 lbs/hr	4.2 tons/yr
PM10	0.6 lbs/hr	0.6 tons/yr

    These emissions are derived from the estimated overall emissions contribution. Compliance shall be determined as stated in Conditions 72 and 76.
    (9 VAC 5-80-490 B & C and Condition No. 58 of the 07/18/12 SOP)

83. Visible emissions from the coal crushers (ES-9e and ES-9f) shall not exceed 20 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.
    (9 VAC 5-50-80, 9 VAC 5-80-490 B & C and Condition No. 8 of the 01/08/04 NSR and 40 CFR 60 Subpart Y)

84. Except where this permit is more restrictive than the applicable requirement, the NSPS equipment (coal crushers ES-9e and ES-9f) shall be operated in compliance with the requirements of 40 CFR 60, Subpart Y.
    (9 VAC 5-50-400, 9 VAC 5-50-410, 9 VAC 5-80-490 B & C and Condition No. 9 of the 01/08/04 NSR)

85. The yearly throughput of coal to the eleven coal conveyors (ES-9c) shall not exceed 4,614,768 tons, calculated as the sum of each consecutive 12 months period.
(9 VAC 5-80-490 B & C, 9 VAC 5-170-160, Condition No. 59 of the 07/18/12 SOP)

86. The annual throughput of coal to the coal pile segregation equipment ((ES-9c (R), ES-9c (S), ES-9c (T), ES-9c (P-1), ES-9c (C-1), and ES-9c (CS-1)) shall not exceed 4,614,768 tons, calculated as the sum of each consecutive 12 months period.
(9 VAC 5-80-1180 and Condition 5 of the 6/13/2008 minor NSR permit)

87. Emissions from the operation of coal conveyors (ES-9c) shall not exceed the limitations specified below:

PM	110.0 lbs/hr	27.0 tons/yr
PM10	110.0 lbs/hr	27.0 tons/yr

These emissions are derived from the estimated overall emissions contribution. Compliance shall be determined as stated in Conditions 85 and 98.
(9 VAC 5-80-490 B & C and Condition No. 60 of the 07/18/12 SOP)

88. Emission from the operation of the coal pile segregation equipment (ES-9c (R), ES-9c (S), ES-9c (T), ES-9c (P-1), ES-9c (C-1), and ES-9c (CS-1) shall not exceed the limits specified below:

PM	1.4 lbs/hr	2.9 tons/year
PM-10	0.9 lbs/hr	1.8 tons/year

These emissions are derived from the estimated overall emissions contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance shall be determined as stated in Condition numbers 80 and 100 of this permit.
(9 VAC 5-50-260 and Condition 6 of the 6/13/2008 minor NSR permit)

89. Emissions from the coal storage pile (ES-9d) shall not exceed the limitations specified below:

TSP	123.8 tons/yr
PM10	58.5 tons/yr

These emissions are derived from the estimated overall emissions contribution. Compliance shall be determined as stated in Condition No. 99.
(9 VAC 5-80-490 B & C and Condition No. 61 of the 07/18/12 SOP)

90. The yearly throughput of coal to the coal (rail car) unloading system (ES-9a, ES- 9a (VF)) shall not exceed 4,614,768 tons, calculated as the sum of each consecutive 12 month period.
(9 VAC 5-80-490 B & C and Condition No. 62 of the 07/18/12 SOP)

91. Emissions from the operation of rail car unloading system (BH-9a) shall not exceed the limitations specified below:

TSP	1.0 lbs/hr	1.0 tons/yr 0.010 gr/dscf
PM10	1.0 lbs/hr	1.0 tons/yr

These emissions are derived from the estimated overall emissions contribution. Compliance shall be determined as stated in Conditions 90 and 92.
(9 VAC 5-80-490 B & C and Condition No. 63 of the 07/18/12 SOP)

92. Particulate emissions from the coal (rail car) unloading system (ES-9a, ES-9a (VF)) shall be controlled by a dust collection system that feeds to a baghouse. The baghouse system shall be provided with adequate access for inspection.
(9 VAC 5-50-260, 9 VAC 5-80-490 B & C, 9 VAC 5-80-850 and Condition No. 64 of the 07/18/12 SOP)

93. Visible emissions from the coal (rail car) unloading system baghouse (BH-9a) vent shall not exceed 10 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
(9 VAC 5-50-80, 9 VAC 5-50-410, 40 CFR 60.254 (b)(1), 9 VAC 5-80-490 B & C, 9 VAC 5-80-400, 9 VAC 5-80-850 and Condition No. 65 of the 07/18/12 SOP)

94. Except where this permit is more restrictive than the applicable requirement, the NSPS coal unloading equipment as described in Condition 1 (ES-9a, ES-9a (VF)) shall be operated in compliance with the requirement of 40 CFR 60, Subpart Y.
(9 VAC 5-80-400, 9 VAC 5-50-410, 9 VAC 5-80-1180, 9 VAC 5-80-850, 9 VAC 5-80-490 B & C and Condition No. 66 of the 07/18/12 SOP)

95. Visible emissions from the coal storage piles (ES-9d), coal conveyors (ES-9c), coal rail car unloading system and coal crushing equipment shall not exceed 20 percent opacity, except for one six (6) minute-period in any one (1) hour of not more than 60 percent opacity. Failure to meet the requirements of this section because of the presence of water vapor shall not be a violation of this section.
(9 VAC 5-40-80, 9 VAC 5-80-490 B & and Condition No. 71 of the 07/18/12 SOP)

96. Visible emissions specific to the coal pile segregation equipment ((ES-9c (R), ES-9c (S), ES-9c (T), ES-9c (P-1), ES-9c (C-1), and ES-9c (CS-1)) from the stockpile, conveyor transfers, and fugitive emission sources shall not exceed 10% opacity as

determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
(9 VAC 5-50-80, 9 VAC 5-50-260 and Condition 7 of the 6/13/2008 minor NSR permit)

97. The coal storage piles (ES-9d), coal conveyors (ES-9c), and coal rail car unloading system (ES-9a, ES-9a (VF)) and coal crushing equipment (ES-9e, ES-9f) shall operate in compliance with Chapter 4, Article 1, Emissions Standards for Visible Emissions and Fugitive Dust/Emissions.
(9 VAC 5-80-490 B & C and Condition No. 72 of the 07/18/12 SOP)

B. Monitoring Requirements for Emission Units ID# ES-9a, ES-9a(VF), ES-9c, ES9c (R) , ES-9c (S), ED-9c (T), ES-9c (P-1), ES-9c (C-1), ES-9c (CS-1), ES-9d, ES-9e, ES-9f

98. The permittee shall conduct visible emission inspections from the coal handling handling systems (ES-9c, ES-9d, ES-9e, ES-9f) in accordance with the following procedures and frequencies:

    a. At a minimum of once per week, the permittee shall determine the presence of visible emissions. If during the inspection, visible emissions are observed, a visible emission evaluation (VEE) shall be conducted in accordance with 40 CFR 60, Appendix A, EPA Method 9, unless timely corrective action is taken such that the systems resume operation with no visible emissions. The VEE shall be conducted for a minimum of six minutes. If any of the observations exceed 20%, the VEE shall be conducted for a total of 60 minutes.

    b. All visible emissions inspections shall be performed when the system is operating during daylight hours. If no operation of these systems for business purposes is necessary during a calendar month, the coal handling need not be operated solely to make this compliance determination.

    c. If visible emissions inspections conducted during 12 consecutive weeks show no visible emissions for a particular system, the permittee may reduce the monitoring frequency to once per month for the coal handling facilities. Anytime the monthly visible emissions inspections show visible emissions, or when requested by DEQ, the monitoring frequency shall be increased to once per week for that system .

    d. For systems that do not operate continuously, 12 non-consecutive weekly visible inspections shall be performed. If visible emissions inspections conducted during 12 non-consecutive weeks show no visible emissions for a particular process system, the permittee may reduce the monitoring frequency to once per month for that system. Anytime the monthly visible emissions inspections show visible emissions, or when requested by DEQ, the monitoring frequency shall be increased to once per week for that system.

All observations, VEE results, and corrective actions taken shall be recorded. (9 VAC 5-80-490 E)

99. The permittee shall conduct visible emissions inspections for BH-9a, ES-9c (R), ES-9c (S), ES-9c (T), ES-9c (P-1), ES-9c (C-1), and ES-9c (CS-1), in accordance with the following procedures and frequencies:

a. At a minimum of once per week, the permittee shall determine the presence of visible emissions. If during the inspection, visible emissions are observed, a visible emission evaluation (VEE) shall be conducted in accordance with 40 CFR 60, Appendix A, EPA Method 9, unless timely corrective action is taken such that the systems resume operation with no visible emissions. The VEE shall be conducted for a minimum of six minutes. If any of the observations exceed 10%, the VEE shall be conducted for a total of 60 minutes.

b. All visible emissions inspections shall be performed when the system is operating during daylight hours. If no operation of these systems for business purposes is necessary during a calendar month, the coal handling need not be operated solely to make this compliance determination.

c. If visible emissions inspections conducted during 12 consecutive weeks show no visible emissions for a particular system, the permittee may reduce the monitoring frequency to once per month for the coal handling facilities. Anytime the monthly visible emissions inspections show visible emissions, or when requested by DEQ, the monitoring frequency shall be increased to once per week for that system.

d. For systems that do not operate continuously, 12 non-consecutive weekly visible inspections shall be performed. If visible emissions inspections conducted during 12 non-consecutive weeks show no visible emissions for a particular process system, the permittee may reduce the monitoring frequency to once per month for that system. Anytime the monthly visible emissions inspections show visible emissions, or when requested by DEQ, the monitoring frequency shall be increased to once per week for that system.

All observations, VEE results, and corrective actions taken shall be recorded. (9 VAC 5-80-490 E)

C. Recordkeeping for Emission Units ID# ES-9a, ES-9a(VF), ES-9c, ES9c (R) , ES-9c (S), ED-9c (T), ES-9c (P-1), ES-9c (C-1), ES-9c (CS-1), ES-9d, ES-9e, ES-9f

100. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Piedmont Regional Office. These records shall include, but are not limited to:

1. The annual throughput of raw coal processed, calculated monthly as the sum of each consecutive 12 month period

2. Scheduled and unscheduled maintenance and training records.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.
(9 VAC 5-80-410 of State Regulations and Condition No. 10 of the 01/08/04 NSR)

101. The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Piedmont Regional Office. These records shall include, but are not limited to:

a. Annual amount of coal (tons) transferred to the coal (rail car) unloading system, calculated monthly as the sum of each consecutive 12-month period.

b. All performance tests.

c. All VEEs.

d. Scheduled and unscheduled maintenance.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.
(9 VAC 5-50-50, 9 VAC 5-80-1180, 9 VAC 5-80-900, 9 VAC 5-80-490 B & C and Condition No. 70 of the 07/18/12 SOP)

D. Testing Requirements for Emission Units ID# ES-9a, ES-9a(VF), ES-9c, ES9c (R) , ES-9c (S), ED-9c (T), ES-9c (P-1), ES-9c (C-1), ES-9c (CS-1), ES-9d, ES-9e, ES-9f

102. The permitted facility shall be constructed so as to allow for emissions testing and monitoring upon reasonable notice at any time, using appropriate methods. Test ports shall be provided when requested at the appropriate locations.
(9 VAC 5-80-490 E and Condition No. 11 of the 01/08/04 NSR)

103. Continuing performance test shall be conducted for particulate matter from the coal (rail car) unloading system baghouse vent exhaust to determine compliance with the 0.010 gr/dscf emission limit contained in Condition 91, at the following frequency:

    a) If the results of the most recent performance test demonstrate that emissions from the affected facility are greater than 50 percent of the applicable emission standard, a new performance test must be conducted within 12 calendar months of the date that the previous performance test was required to be completed.

    b) If the results of the most recent performance test demonstrate that emissions from the affected facility are 50 percent or less of the applicable emission standard, a new performance test must be conducted within 24 calendar months of the date that the previous performance test was required to be completed.

    c) An owner or operator of an affected facility that has not operated for the 60 calendar days prior to the due date of the performance test is not required to perform the subsequent performance test until 30 calendar days after the next operating day.

    (9 VAC 5-50-30, 9 VAC 5-80-1180, 9 VAC 5- 80-410, 9 VAC 5-80-850, 40 CFR 60.255(b)(1)(i)(ii)(iii) and Condition No. 67 of the 07/18/12 SOP)

104. Continuing Visual Emission Evaluations (VEE) test shall be conducted for particulate matter from the coal (rail car) unloading system baghouse vent exhaust in accordance with 40 CFR 60, Appendix A, Method 9, at the following frequency:

    a. If any 6-minute average opacity reading in the most recent performance test exceeds half the applicable opacity limit, a new performance test must be conducted within 90 days of the date that the previous performance test was required to be completed.

    b. If all 6-minute average opacity readings in the most recent performance test are equal to or less than half the applicable opacity limit, a new performance test must be conducted within 12 calendar months of the date that the previous performance test was required to be completed.

    (9 VAC 5-50-30, 9 VAC 5-80-1180, 9 VAC 50-410, 9 VAC 5-80-490 B & C, 40 CFR 60.255(b)(2)(i)(ii) and Condition No. 68 of the 07/18/12 SOP)

105. Continuing performance tests, as required in Condition No. 104, may not be required if all of the below conditions are met:

    a. Particulate emissions (PM), as determined by the most recent performance test, are less than or equal to the applicable limit;

    b. The control device manufacturer's recommended maintenance procedures are followed; and,

c. A 6-minute average opacity readings from the most recent performance test are equal to or less than half the applicable opacity limit.

(9 VAC 5-50-30, 9 VAC 5-80-1180, 9 VAC 50-410, 9 VAC 5-80-490 B & C, 40 CFR 60.255(d)(1)(2)(3) and Condition No. 69 of the 07/18/12 SOP)

VI. Process Equipment Requirements: Refined Coal –Emission Unit ID # ES-14a, ES-14b, ES-14c, ES-14d

A. Limitations for Emission Units ID # ES-14a, ES-14b, ES-14c, ES-14d

106. Particulate emissions from the S-Sorb receiving silo (Ref. No. ES-14a) and the S-Sorb active silo (Ref. No. ES-14b) shall be controlled by a fabric filter. Each fabric filter shall be provided with adequate access for inspection.
(9 VAC 5-80-1180, 9 VAC 5-50-260, and Condition 2 of the 05/04/2011 Minor NSR Permit)

107. Particulate emissions from the transfer points of the sorbent transfer conveyor (Ref. No. ES-14c) and the sorbent transfer chute (Ref. No. ES-14d) shall be controlled by full enclosures or equivalent. Each enclosure shall be provided with adequate access for inspection
(9 VAC 5-80-1180, 9 VAC 5-50-260, and Condition 3 of the 05/04/2011 Minor NSR Permit)

108. The annual throughput of S-Sorb to the refined coal system (Ref. No. ES-14) shall not exceed 42,101 tons per year, calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-80-1180 and Condition 4 of the 05/04/2011 Minor NSR Permit)

109. Emissions from the operation of the refined coal system (Ref. No. ES-14) shall not exceed the limits specified below:

PM	0.26 lb/hr	0.12 ton/year
PM-10	0.26 lb/hr	0.11 ton/year

These emissions are derived from the estimated overall emission contribution. Compliance shall be determined as stated in Condition 107, 108 and 109.
(9 VAC 5-80-1180, 9 VAC 5-50-260, and Condition 5 of the 05/04/2011 Minor NSR Permit)

110. Visible emissions from the S-Sorb receiving silo (Ref. No. ES-14a) and the S-Sorb active silo (Ref. No. Es-14b) shall not exceed 10% opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A)
(9 VAC 5-80-1180, 9 VAC 5-50-80, 9 VAC 5-50-260, and Conditions 6 of the 05/04/2011 Minor NSR Permit)

111. Visible emissions from the transfer points of the sorbent transfer conveyor (Ref. No. ES-14c) and the sorbent transfer chute (Ref. No. ES-14d) shall not exceed 10% opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A) (9 VAC 5-80-1180, 9 VAC 5-50-80, 9 VAC 5-50-260, and Conditions 7 of the 05/04/2011 Minor NSR Permit)

B. Monitoring for Emission Units ID # ES-14a, ES-14b, ES-14c, ES-14d

112. The permittee shall conduct visible emissions inspections for ES-14a, ES-14b, ES-14c, and ES-14d in accordance with the following procedures and frequencies:

a. At a minimum of once per week, the permittee shall determine the presence of visible emissions. If during the inspection, visible emissions are observed, a visible emission evaluation (VEE) shall be conducted in accordance with 40 CFR 60, Appendix A, EPA Method 9, unless timely corrective action is taken such that the systems resume operation with no visible emissions. The VEE shall be conducted for a minimum of six minutes. If any of the observations exceed 10%, the VEE shall be conducted for a total of 60 minutes.

b. All visible emissions inspections shall be performed when the system is operating during daylight hours. If no operation of these systems for business purposes is necessary during a calendar month, the coal handling need not be operated solely to make this compliance determination.

c. If visible emissions inspections conducted during 12 consecutive weeks show no visible emissions for a particular system, the permittee may reduce the monitoring frequency to once per month for the coal handling facilities. Anytime the monthly visible emissions inspections show visible emissions, or when requested by DEQ, the monitoring frequency shall be increased to once per week for that system.

d. For systems that do not operate year round, 12 non-consecutive weekly visible inspections shall be performed. If visible emissions inspections conducted during 12 non-consecutive weeks show no visible emissions for a particular process system, the permittee may reduce the monitoring frequency to once per month for that system. Anytime the monthly visible emissions inspections show visible emissions, or when requested by DEQ, the monitoring frequency shall be increased to once per week for that system.

All observations, VEE results, and corrective actions taken shall be recorded. (9 VAC 5-80-490 E)

C. Recordkeeping Emission Units ID # ES-14a, ES-14b, ES-14c, ES-14d

113. The permittee shall maintain records of all emissions data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Piedmont Regional Office. These records shall include, but are not limited to:

    1. The annual throughput of S-Sorb used in the refined coal system (ES-14) in tons calculated monthly as the sum of each consecutive 12-month period.

    2. Scheduled and unscheduled maintenance.

    These records shall be available for inspection by the DEQ and shall be current for the most recent five (5) years.
    (9 VAC 5-80-1180, 9 VAC 5-50-50 and Condition 8 of the 05/04/2011 Minor NSR Permit)

VII. Process Equipment Requirements: Flyash Reutilization (Emission Unit# ES-10)

A. Limitations for Emission Unit ID # ES-10

114. Particulate and PM10 emissions from ash excavating, unpaved haul roads, paved haul roads, pugmill ash transfers, haul truck loading, wind erosion from inactive ash areas, wind erosion from active areas, rubber tire loader operation, cat dozer operation, stabilization agent pneumatic transfers, pugmill stabilization agent transfers, pugmill operations, and the transfer of the stabilization agent/ash mixture shall be controlled as described in the best management practice plan in attachment B and as follows:

    a. Traffic areas, shall be controlled by wet suppression or equivalent (as approved by the DEQ).

    b. Unpaved road ways shall be controlled by wet suppression. Virginia Power shall apply a minimum of 0.01 inches of water to all unpaved road surfaces on a daily basis.

    c. All material being stockpiled shall be kept moist to control dust during storage and handling or covered at all times to minimize emissions.

    d. Paved haul roads shall be controlled by wet suppression.

    e. Reasonable precautions shall be taken to prevent deposition of dirt on public roads and subsequent dust emissions. These measures shall include paving the haul road for the first 0.7 miles from the public road. Trucks leaving the site shall have clean wheels - achieved by use of a wheel washer or equivalent. Dirt spilled or tracked onto paved surfaces shall be promptly removed to prevent particulate matter from becoming airborne.

    (9 VAC 5-80-490 B & C and Condition No. 73 of the 07/18/12 SOP)

115. Particulate and PM10 emissions from the pneumatic loading of the two (2) cement silos shall be controlled by fabric filter with a rated control efficiency of 99 percent. The fabric filter shall be provided with adequate access for inspection.
(9 VAC 5-80-490 B & C and Condition No. 74 of the 07/18/12 SOP)

116. The flyash reutilization project shall process no more than 2,000,000 tons of flyash per year, and shall utilize no more than 133,333 trucks per year (based upon the proposed truck hauling weight specification), or the number of trucks which will produce equivalent emissions at different actual truck hauling weights, calculated as the sum of each consecutive 12 month period.

    a. The flyash reutilization project shall include no more than 55,500 tons of coal ash from other Dominion facilities.

    b. The flyash reutilization project also includes no more than 67,000 tons of coal ash from the Hopewell Power Station, which received a DEQ exemption letter on August 2, 2007.

    (9 VAC 5-80-490 B & C and Condition No. 75 of the 07/18/12 SOP)

117. The annual throughput of stabilization agent to the silo(s) shall not exceed 100,000 tons per year calculated monthly as the sum of each consecutive 12 month period.
(9 VAC 5-80-490 B & C and Condition No. 76 of the 07/18/12 SOP)

118. Emissions from the operation of the flyash reutilization project shall not exceed the limits specified below:

Total Suspended Particulate	80.7 lbs/hr	24.6 tons/yr
PM10	33.0 lbs/hr	7.9 tons/yr

    Compliance with these emission limits shall be determined by compliance with the Best Management Practice Plan and Conditions 114, 115 and 116.
    (9 VAC 5-80-490 B & C and Condition No. 77 of the 07/18/12 SOP)

119. Visible emissions from ash excavating, paved haul roads, pugmill ash transfers, haul truck loading, wind erosion from inactive ash areas, wind erosion from active areas, rubber tire loader operation, cat dozer operation, pugmill stabilization agent transfer, pugmill operation, and the transfer of stabilization agent/ash mixture shall not exceed ten (10%) percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
    (9 VAC 5-50-80, 99 VAC 5-80-490 B & C and Condition No. 78 of the 07/18/12 SOP)

120. Visible emissions from the unpaved haul roads shall not exceed five (5 %) percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
(9 VAC 5-50-80, 9 VAC 5-80-490 B & C and Condition No. 79 of the 07/18/12 SOP)

121. Visible emissions from the pneumatic loading of the storage silo shall not exceed five (5%) percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A)
(9 VAC 5-50-80, 9 VAC 5-80-490 B & C and Condition No. 80 of the 07/18/12 SOP)

122. The permittee shall furnish written notification to the Director, Piedmont Region of:

    a. The actual date on which the ash removal project commenced, shall be reported within thirty (30) days after commencement.

    b. Anticipated date of initial start-up of the ash removal project postmarked not more than 60 days nor less than 30 days prior to such date.

(9 VAC 5-80-490 B & C and Condition No. 81 of the 07/18/12 SOP)

123. This permit shall become invalid if installation of the proposed ash removal project is not commenced within eighteen (18) months of the date of this permit or if it is discontinued for a period of eighteen (18) months.
(9 VAC 5-80-490 B & C and Condition No. 82 of the 07/18/12 SOP)

B. Monitoring, Recordkeeping and Testing Requirements for Emission Unit ID # ES-10

124. Each fabric filter shall be equipped with a device to continuously measure the differential pressure drop across the fabric filter. The device shall be installed in an accessible location and shall be maintained by the permittee such that it is in proper working order at all times. At least one time per week, an observation of the presence of visible emissions from the fly ash handling systems shall be made. If visible emissions are observed, the permittee shall take timely corrective actions such that the systems resume operation with no visible emissions, or perform a visible emission evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9 to assure visible emissions from the systems do not exceed twenty percent (20%) opacity. The VEE shall be conducted for a minimum of six minutes. If compliance is not demonstrated by this VEE, timely corrective action shall be taken such that the systems resume operation with visible emissions of 20 percent or less. The permittee shall maintain an observation log to demonstrate compliance. The log shall include the date and time of the observations, whether or not there were visible emissions, any VEE recordings and any necessary actions.
(9 VAC 5-80-490 E)

125. The Best Management Practice Plan for Fly Ash Reutilization, which contains monitoring and testing requirements, is attached as a part of the Title V permit. (9 VAC 5-80-490 E)

C. Reporting for Emission Unit ID # ES-10

126. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Director, Piedmont Regional Office. These records shall include, but are not limited to:

a. The yearly throughput of flyash in tons, calculated as the sum of each consecutive 12 month period,

b. The yearly total usage of trucks, both vehicle miles traveled and number of trucks, for the flyash reutilization project, calculated as the sum of each consecutive 12 month period,

c. The yearly throughput of stabilization agent to the silo, calculated as the sum of each consecutive 12 month period and

d. The amount of water applied to the unpaved roadways. In addition, Virginia Power shall provide the records and calculations needed to determine compliance with condition emissions from the flyash Reutilization Project.

e. The yearly throughput of coal ash in tons from other Dominion facilities, calculated as the sum of each consecutive 12 month period

f. The yearly total usage of trucks from other Dominion facilities that haul coal ash at the Chesterfield facility, calculated as the sum of each consecutive 12 month period.

(9 VAC 5-80-490, 9 VAC 5-50-50 and Condition No. 96 d, e, f ,g of the 07/18/12 SOP)

VIII. Process Equipment Requirements: Limestone Handling Equipment, Gypsum Conveying System, and Limestone Crushing Operations– (Emission Units ID # ES-11a, ES-11b, ES-11c , ES-11d, ES-12, ES-13)

A. Limitations for Emission Units ID # ES-11a, ES-11b, ES-11c, ES-11d, ES-12, ES-13

127. Except where this permit is more restrictive than the applicable requirement, the limestone and gypsum handling equipment shall be operated in compliance with the applicable requirements of 40 CFR 60, Subpart OOO.

(9 VAC 5-80-490 B & C, 40 CFR 60, Subpart OOO)

128. Visible emissions emitted outside a building for the belt conveyors and feeders for the limestone conveying system (ES-11b) and the gypsum conveying system (ES-12) and other affected equipment, all of which were constructed, modified or reconstructed after 08/31/1983 but before 04/22/2008 and are subject to NSPS Subpart OOO, shall not exceed 10% opacity as determined by EPA Method 9 or other approved methods.
(9 VAC 5-80-490 B & C, 40 CFR 60, Subpart OOO, Section 60.672 (b))

129. Visible emissions emitted outside a building for the belt conveyors and feeders for the limestone conveying system (ES-11b) and the gypsum conveying system (ES-12) and other affected equipment, all of which were constructed, modified or reconstructed after 4/22/2008 and are subject to NSPS Subpart OOO, shall not exceed 7% opacity as determined by EPA Method 9 or other approved methods.
(9 VAC 5-80-490 B & C, 40 CFR 60, Subpart OOO, Section 60.672 (b))

130. Visible emissions emitted inside a building for the belt conveyor and feeder for the limestone conveying system (ES-11b) and gypsum conveying system (ES-12) and other affected equipment, all of which were constructed, modified or reconstructed after 08/31/1983 but before 04/22/2008 and are subject to NSPS Subpart OOO, shall not exceed 10 % opacity as determined by EPA approved methods.
(9 VAC 5-80-490 B & C, 40 CFR 60, Subpart OOO, Section 60.672(e))

131. Visible emissions emitted inside a building for the belt conveyor and feeder for the limestone conveying system (ES-11b) and gypsum conveying system (ES-12) and other affected equipment, all of which were constructed, modified or reconstructed on or after 04/22/2008 and are subject to NSPS Subpart OOO, shall not exceed 7 % opacity as determined by EPA approved methods.
(9 VAC 5-80-490 B & C, 40 CFR 60, Subpart OOO, Section 60.672(e))

132. Visible emissions that vent inside a building from the ball mills (ES-11c) and grinder with associated SO_3 abatement system (ES-13), all of which were constructed, modified or reconstructed after 08/31/1983 but before 04/22/2008 and are subject to NSPS Subpart OOO, shall not exceed 10% opacity as determined by EPA approved methods.
(9 VAC 5-80-490 B & C, 40 CFR 60, Subpart OOO, Section 60.672(e)(2))

133. Visible emissions that vent inside a building from the ball mills (ES-11c) and grinder with associated SO_3 abatement system (ES-13), all of which were constructed, modified or reconstructed on or after 04/22/2008 and are subject to NSPS Subpart OOO shall not exceed 7% opacity as determined by EPA approved methods.
(9 VAC 5-80-490 B & C, 40 CFR 60, Subpart OOO, Section 60.672(e)(2))

134. Visible emission from the limestone storage bin baghouse (ES-13) which are subject to NSPS Subpart OOO shall not exceed 7% opacity as determined by EPA Method 9.
(9 VAC 5-80-490 B & C, 40 CFR 60, Subpart OOO, Section 60.672 (f))

135. Visible emissions from the barge unloading (ES-11a) and loading which are subject to NSPS Subpart OOO shall not exceed 10% opacity as determined by EPA Method 9 or other approved methods.
(9 VAC 5-80-490 B & C, 40 CFR 60, Subpart OOO, Section 60.672 (b))

B. Monitoring Requirements for Emission Units ID # ES-11a, ES-11b, ES-11c, ES-11d, ES-12, ES-13

136. The permittee shall conduct visible emission inspections from the limestone conveying operations (ES-11b) and the gypsum conveying system (ES-12) located outside the building in accordance with the following procedures and frequencies:

a. At a minimum of once per week, the permittee shall determine the presence of visible emissions. If, during the inspection, visible emissions are observed, a visible emission evaluation (VEE) shall be conducted in accordance with 40 CFR 60, Appendix A, EPA Method 9 unless timely corrective action is taken such that the limestone conveying system resumes operation with no visible emissions. The VEE shall be conducted for a minimum of six minutes. If any of the observations exceed 10%, the VEE shall be conducted for a total of 60 minutes.

b. All visible emissions inspections shall be performed when the system is operating during daylight hours. If no operation of the limestone and gypsum conveying operations or business purposes is necessary during a calendar month, limestone conveying operations need not be operated solely to make this compliance determination.

c. If visible emissions inspections conducted during 12 consecutive weeks show no visible emissions for this system, the permittee may reduce the monitoring frequency to once per month for the limestone and gypsum conveying system. Anytime the monthly visible emissions inspections show visible emissions, or when requested by DEQ, the monitoring frequency shall be increased to once per week for that system.

d. If the limestone conveying system and the gypsum conveying system does not operate year round, 12 non-consecutive weekly visible inspections shall be performed. If the visible emissions inspections conducted during 12 non-consecutive weeks show no visible emissions, the permittee may reduce the monitoring frequency to once per month for the limestone and gypsum conveying system. Anytime the monthly visible emissions inspections show visible emissions, or when requested by DEQ, the monitoring frequency shall be increased to once per week for the limestone conveying system.

All observations, VEE results, and corrective actions taken shall be recorded.

(9 VAC 5-80-490 E)

C. Recordkeeping for Emission Units ID # ES-11a, ES-11b, ES-11c, ES-11d, ES-12, ES-13

137. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Piedmont Regional Office. These records shall include, but are not limited to:

    a. Records are to be maintained on-site that provide the monthly opacity observations and throughput.

    b. These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

    (9 VAC 5-80-410, 9 VAC 5-80-490 E)

D. Testing Requirements for Emission Units ID # ES-11a, ES-11b, ES-11c, ES-11d, ES-12, ES-13

138. The permitted facility shall be constructed so as to allow for emissions testing and monitoring upon reasonable notice at any time, using appropriate methods. Test ports shall be provided when requested at the appropriate locations.
(9 VAC 5-80-490 E)

IX. Process Equipment Requirements: Emergency Combustion Turbine, Emergency Diesel Generators, Fire Pump (Emission Unit ID # IS-2, IS-38, QWP-5, QWP-6, EDG-78, FP-6)

A. Limitations, Monitoring, Recordkeeping, Testing and Reporting Requirements for Unit ID # IS-2, IS-38, QWP-5, QWP-6, EDG-78

139. The emergency combustion turbine (IS-2) shall consume no more than 16,800 gallons of No. 2 oil per year, calculated as the sum of each consecutive 12 month period.
(9 VAC 5-80-110 and Condition No. 51 of the 07/18/12 SOP)

140. Emissions from the operation of the emergency combustion turbine shall not exceed the limits specified below:

$SO2^1$	2.64 lbs/10^6 Btu	12.4 lbs/hr	3.1 tons/yr
$NO2^2$		3.2 lbs/hr	0.8 tons/yr

1. Sulfur dioxide emissions for each unit may vary in accordance with 9 VAC 5-40-280 of State Regulations. Compliance shall be based on the emissions in pound per hour.
2. Emissions are included for inventory purposes.

(9 VAC 5-80-490 B & C and Condition No. 52 of the 07/18/12 SOP)

141. Visible emissions from the emergency gas turbine shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60 percent opacity. Visible emissions shall be determined as indicated by EPA Method 9 (reference: 40 CFR Part 60, Appendix A).
(9 VAC 5-80-490 B & C and Condition No. 53 of the 07/18/12 SOP)

142. Except where this permit is more restrictive than the applicable requirement, the Solar Turbines Inc. combustion turbine emergency generator (IS-2) and Cummins emergency diesel generator (EDG-78) shall be operated in compliance with the applicable provisions of 40 CFR 63, Subpart ZZZZ.
(9 VAC 5-80-490 B & C, 40 CFR Part 63 Subpart ZZZZ)

143. Except where this permit is more restrictive than the applicable requirement, the Cummins emergency diesel generator (Unit IS-38), emergency diesel quench water pumps (QWP-5, QWP-6) and the John Deere Fire Pump (FP-6), shall be operated in compliance with the applicable provisions of 40 CFR 63, Subpart ZZZZ and 40 CFR 60, NSPS Subpart IIII.
(9 VAC 5-80-490 B & C, 40 CFR Part 63 Subpart ZZZZ, 40 CFR 60 Subpart IIII)

144. Visible emissions from Unit IS-2, Unit IS-38, EDG-78, QWP-5, QWP-6 and FP-6 shall not exceed 20 percent opacity, except for one six-minute period in any one hour of not more than 30 % opacity. Failure to meet the requirements of this condition because of the presence of water vapor shall not be a violation of this section.
(9 VAC 5-80-490 B & C and 9 VAC 5-50-80)

X. Fuel Burning Equipment Requirements: Thaw Shed Heaters Pipeline Heater (Emission Unit ID # IS-30, IS-4)

A. Limitations, Monitoring, Recordkeeping, Testing and Reporting Requirements for Units # IS-30, IS-4

145. Except where this permit is more restrictive than the applicable requirement, the Thaw Shed Heaters (IS-30) and natural gas Pipeline Heater (IS-4) shall be operated in compliance with the applicable provisions of 40 CFR Part 63 Subpart DDDDD.
(9 VAC 5-80-490 B & C, 40 CFR Part 63 Subpart DDDDD)

146. Visible emissions from Thaw Shed Heaters (IS-30) and natural gas Pipeline Heater (IS-4) shall not exceed 20 percent opacity, except for one six-minute period in any one hour of not more than 30 % opacity. Failure to meet the requirements of this condition because of the presence of water vapor shall not be a violation of this section.
(9 VAC 5-80-490 B & C and 9 VAC 5-50-80)

XI. Solvent Metal Cleaning Operations – Non-Halogenated Cold Solvent Degreasers (Emission Unit # IS-45)

A. Limitations, Monitoring, Recordkeeping, Testing and Reporting Requirements for Units # IS-45

147. No owner or other person shall use or permit the use of any cold cleaner unless such cleaner is equipped with a control method that will remove, destroy or prevent the discharge into the atmosphere of at least 85% by weight of volatile organic compound emissions.
(9 VAC 5-80-110 and 9 VAC 5-40-3280 C)

148. Achievement of the emission standard in Condition 147 by use of the methods in 9 VAC 5-40-3290 C and D will be acceptable to the board.
(9 VAC 5-80-110 and 9 VAC 5-40-3280 C)

149. Emissions from each solvent metal cleaning operation (cold cleaning) shall be controlled as follows:

a. Covers or enclosed remote reservoirs should be provided. Covers shall be designed so that they can be easily operated with one hand. (Covers for large degreasers may require mechanical assistance, by spring loading, counter weighting or powered systems). Enclosed remote reservoirs should be designed such that they provide reduction effectiveness equivalent to that of a cover.

b. External or internal drainage facilities shall be provided to collect and return the solvent to a closed container or solvent cleaning machine. If solvent volatility is greater than 0.6 psi measured at 100°F, then the drainage facilities should be internal, so that parts are enclosed under the cover while draining. The drainage facilities may be external for applications where an internal type cannot fit into the cleaning system.

c. A permanent label summarizing the operating procedures in Condition 151. Should be placed in a conspicuous location on or near the degreaser.

d. If used, the solvent spray should be a solid, fluid stream (not a fine, atomized or shower type spray) and at a pressure which does not cause excessive splashing.

(9 VAC 5-80-110 and 9 VAC 5-40-3290 C1)

150. The permittee shall operate each solvent cleaning operation (cold cleaning) consistent with good operating practices including the following:

    a. Waste solvent should not be disposed of or transferred to another party, such that greater than 20% of the waste (by weight) can evaporate to the atmosphere. Store waste solvent only in closed containers.

    b. The cold cleaning unit should be closed whenever not handling parts in the cold cleaner

    c. Cleaned parts should drain for at least 15 seconds or until dripping ceases.

    (9 VAC 5-80-110, 9 VAC 5-40 3280 c.1 & 2, and 9 VAC 5-40-3290 C.2)

151. The permittee shall dispose of waste solvent from the cold cleaning units by one of the following methods:

    a. Reclamation (either by outside services or in-house)

    b. Incineration

    (9 VAC 5-80-490, 9 VAC 5-40-3280 C.1 & 2, and 9 VAC 5-40-3290.D)

152. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Piedmont Regional Office. The records shall include, but are not limited to:

    a. Records documenting that each solvent metal cleaning operation (cold cleaning) at the facility is in compliance with the requirements of Conditions 148 – 152.

    (9 VAC 5-80-110)

XII. Facility Wide Conditions

A. Limitations

153. Total annual emissions from the operation of the four (4) coal fired boilers, two (2) combined cycle combustion turbines, one (1) emergency gas turbine, one (1) emergency generator, two (2) coal crushers, storage pile(s), eleven conveyors, one (1) rail car unloading system, and the flyash reutilization project shall not exceed the limits specified below:

TSP	6,331.3	tons/yr
PM10	6,249.3	tons/yr
SO2	156,764.6	tons/yr
NO2	37,565.6	tons/yr
CO	2,306.1	tons/yr

VOC	275.3	tons/yr
PB	3.0	tons/yr

*The emission estimates above are an overall emissions contribution and shall not be used as compliance standards.
(9 VAC 5-80-490 B & C and Condition No. 91 of the 07/18/12 SOP)

154. Nitrogen oxide emissions from Virginia Power's Chesterfield Power Station, starting in the year 2000, shall not exceed 5,759 tons from June 1 to August 31 (inclusive) of each calendar year, except as provided in Condition 155 of this permit. Virginia Power will determine the actual NOx emissions released from the Chesterfield Power Station from June 1 to August 31 of each calendar year. NO_x emissions, for emissions units required to operate continuous emissions monitors, shall be determined by continuous emission monitors, operated in accordance with the provisions of 40 CFR 60. For emissions units not required to operate continuous emissions monitors, AP-42 emissions factors, manufacturer's data, or stack testing data shall be used to calculate NO_x emissions. Virginia Power shall provide to the Department (Piedmont Regional Office, DEQ, 4949-A Cox Road, Glen Allen, Va 23060-5020) the calculated NO_x emissions and any supporting data that the Department may reasonably request, all information shall be received by the 15th of October of each calendar year, in order that the Department may verify that the agreed-upon limits are being met.
(9 VAC 5-80-490 B & C and Condition No. 92 of the 07/18/12 SOP)

155. If Virginia Power demonstrates to the satisfaction of the Director, Piedmont Regional Office, of the Department of Environmental Quality, Virginia Power has caused a reduction in the emissions of any other source of NO_x in the Richmond Ozone Emissions Control Area to a level below that projected in the Maintenance Plan, the emissions limit for the Chesterfield Power Station may be increased by an equal amount. This condition applies to the emission limit in Condition 154 and to the combustion units and the fuel burning equipment located at the Chesterfield Power Station at the time of the issuance of this permit. Furthermore this condition does not supersede any applicable new source review or state implementation plan requirements.
(9 VAC 5-80-490 B & C and Condition No. 93 of the 07/18/12 SOP)

156. Emissions shall be controlled by proper operation and maintenance of combustion equipment and air pollution control equipment. The permittee shall develop, maintain, and have available to all operators good written operating procedures and a maintenance schedule for Units 3, 4, 5, 6, 7, 8, the emergency combustion turbines, emergency diesel generator, coal handling equipment, flyash reutilization equipment, equipment and associated air pollution control equipment. A maintenance schedule for all such equipment shall be established and made available to the Director, Piedmont Regional Office for review. All records required by this condition shall be

kept on site for the most current five (5) year period and made available for inspection by the DEQ.
(9 VAC 5-80-490 B & C and Condition No. 95 of the 07/18/12 SOP)

B. Monitoring and Recordkeeping

157. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Director, Piedmont Regional Office. These records shall include, but are not limited to:

a. The monthly throughput of natural gas, the monthly throughput of distillate oil, the monthly throughput of coal, and

b. All fuel supplier certifications, and

c. Records of all oil and coal shipments purchased indicating the supplier, volume\weight of the shipment, and date on which the shipment was made, and all subsequent oil and coal analyses to include weight percent sulfur content, and

d. The yearly throughput of flyash in tons, calculated as the sum of each consecutive 12 month period, and

e. The yearly throughput of coal ash in tons from other Dominion facilities, calculated as the sum of each consecutive 12 month period, and

f. The yearly total usage of trucks, both vehicle miles traveled and number of trucks, for the flyash reutilization project, calculated as the sum of each consecutive 12 month period, and

g. The yearly total usage usage of trucks, both vehicle miles traveled and number of trucks, for the flyash reutilization project, calculated as the sum of each consecutive 12 month period, and

h. The yearly throughput of stabilization agent to the silo, calculated monthly as the sum of each consecutive 12 month period and

i. The amount of water applied to the unpaved road ways. In addition Virginia Power shall provide the records and calculations need to determine compliance with condition 90.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.
(9 VAC 5-80-490, 9 VAC 5-50-50 or as specified in previous permits and Condition No. 96 of the 07/18/12 SOP)

C. Testing

158. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following methods in accordance with procedures approved by the DEQ.

(9 VAC 5-80-490)

XIII. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
08-FO-TK-1	Fuel Oil Storage Tank	9 VAC 5-80-710 B	VOC	11,256,000 gallons
00-FH-TK-1	Diesel Fuel Storage Tank	9 VAC 5-80-720 B	VOC	12,300 gallons
00-FH-TK-2	Gasoline Tank	9 VAC 5-80-710 B	VOC	5,000 gallons
00-WO-TK-1	Used Oil Storage Tank	9 VAC 5-80-720 B	VOC	5,000
Condensate Tanks	Natural Gas Condensate Tanks	9 VAC 5-80-720 B	VOC	400 gallons
Non Portable Tanks	Non Portable Petroleum Storage Tanks	9 VAC 5-80-720 B	VOC	varies
Portable Tanks	Portable Petroleum Storage Tanks	9 VAC 5-80-720 B	VOC	varies
Inside Tanks	Petroleum Storage Tanks located inside buildings	9 VAC 5-80-720 B	VOC	varies
Propane Tank	Propane Storage Tank	9 VAC 5-80-720 B	VOC	18,000 gallons

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-490 C, E and F.
(9 VAC 5-80-110 and 9 VAC 5-80-720)

XIV. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
40 CFR 60 Subpart Kb (9 VAC 5-50-410, Subpart Kb)	Standards of Performance for Volatile Organic Liquid Storage Vessels (including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	Applicable to storage vessels used to store volatile organic liquids: Fuel Oil Storage Tank (IS-5) is exempt from this requirement.
40 CFR 60 Subpart D (9 VAC 5-50-410, Subpart D)	Standards of Performance for Fossil Fuel Fired Steam Generators for Which Construction Commenced After August 17, 1971	Applicable to Fossil Fuel Fired Steam Generators Constructed Prior to 08/17/1971: Boilers (ES-3, ES-4, ES-5, ES-6) are exempt from this requirement.
40 CFR 60 Subpart Da (9 VAC 5-50-410, Subpart Da)	Standards of Performance for Fossil Fuel Fired Steam Generators for Which Construction Commenced After September 18, 1978	Applicable to Fossil Fuel Fired Steam Generators Constructed Prior to 09/18/1978: Boilers (ES-3, ES-4, ES-5, ES-6) are exempt from this requirement.
40 CFR 60 Subpart Db (9 VAC 5-50-410, Subpart Db)	Standards of Performance for Industrial, Commercial, Institutional Steam Generating Units	Applicable to Industrial, Commercial, Institutional Steam Generating Units constructed prior to June 19, 1984.: Boilers (ES-3, ES-3, ES-4, ES-5, ES-6) are exempt from this requirement.
40 CFR 60 Subpart Dc (9 VAC 50-410, Subpart Dc)	Standards of Performance for Small Industrial, Commercial, Institutional Steam Generating Units	Applicable to Small Industrial, Commercial, Institutional Steam Generating Units constructed prior to June 9, 1989.: Boilers (ES-3, ES-3, ES-4, ES-5, ES-6) are exempt from this requirement.
40 CFR 60 Subpart KKKK (9 VAC 50-410 Subpart KKKK)	Standards of Performance for Stationary Combustion Turbines	Applicable to Stationary Combustion Turbines constructed after February 18, 2005. Turbines (ES-7 ES-8 are exempt from this requirement.

Citation	Title of Citation	Description of Applicability
40 CFR 63 SubpartYYYY (9 VAC 60-100 Subpart YYYY)	National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines	Applicable to Stationary Combustion Turbines constructed before January 14, 2003.: Turbines (ES-7, ES-8 are exempt from this requirement as existing sources.

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.
(9 VAC 5-80-500)

XV. General Conditions

A. Federal Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.
(9 VAC 5-80-490 N)

B. Permit Expiration

This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless a timely and complete renewal application consistent, with 9 VAC 5-80-430, has been submitted, to the Department, by the owner, the right of the facility to operate shall be terminated upon permit expiration.

1. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.

2. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-510.

3. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.

4. If an applicant submits a timely and complete application under section 9 VAC 5-80-430 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-500, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.

5. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-430 shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-430 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.

(9 VAC 5-80-430 B, C and F, 9 VAC 5-80-490 D and 9 VAC 5-80-170 B)

C. Recordkeeping and Reporting

1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:

   a. The date, place as defined in the permit, and time of sampling or measurements.

   b. The date(s) analyses were performed.

   c. The company or entity that performed the analyses.

   d. The analytical techniques or methods used.

   e. The results of such analyses.

   f. The operating conditions existing at the time of sampling or measurement.

   (9 VAC 5-80-490 F)

2. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
(9 VAC 5-80-490 F)

3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than **March 1** and **September 1** of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-430 G, and shall include:

   a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.

   b. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:

      (1) Exceedance of emissions limitations or operational restrictions;

      (2) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or compliance assurance monitoring which indicates an exceedance of emission limitations or operational restrictions; or,

      (3) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.

   c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."

(9 VAC 5-80-490 F)

D. Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than **March 1** each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices for the period ending December 31. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-430 G, and shall include:

1. The time period included in the certification. The time period to be addressed is January 1 to December 31.

2. The identification of each term or condition of the permit that is the basis of the certification.

3. The compliance status.

4. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.

5. Consistent with subsection 9 VAC 5-80-490 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.

6. Such other facts as the permit may require to determine the compliance status of the source.

One copy of the annual compliance certification shall be sent to EPA in electronic format only. The certification document should be sent to the following electgronic mailing address:

R3_APD_Permits@epa.gov

(9 VAC 5-80-490 K.5)

E. Permit Deviation Reporting

The permittee shall notify the Director, Piedmont Region within four daytime business hours, after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition XII.C.3. of this permit.
(9 VAC 5-80-490 F.2)

F. Failure/Malfunction Reporting

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours, notify the Director, Piedmont Region by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within two weeks provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide

the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Piedmont Region.

1. The emission units that have continuous monitors subject to 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not subject to the two week written notification.

2. The emission units subject to the reporting and the procedure requirements of 9 VAC 5-40-50 C and the procedures of 9 VAC 5-50-50 C are as described in this permit.

3. Each owner required to install a continuous monitoring system subject to 9 VAC 5-40-41 or 9 VAC 5-50-410 shall submit a written report of excess emissions (as defined in the applicable emission standard) to the board for every calendar quarter. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter and shall include the following information:

   a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h) or 9 VAC 5-40-41 B 6, any conversion factors used, and the date and time of commencement and completion of each period of excess emissions;

   b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the source. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted;

   c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments; and

   d. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired or adjusted, such information shall be stated in the report.

4. All emission units not subject to 9 VAC 5-40-50 C and 9 VAC 5-50-50 C must make written reports within 14 days of the malfunction occurrence.

(9 VAC 5-20-180 C)

G. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.
(9 VAC 5-80-490 G.1)

H. Duty to Comply

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.
(9 VAC 5-80-490 G.2)

I. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
(9 VAC 5-80-490 G.3)

J. Permit Modification

A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1790, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.
(9 VAC 5-80-490 G & L, 9 VAC 5-80-550 and 9 VAC 5-80-660)

K. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege.
(9 VAC 5-80-490 G.5)

L. Duty to Submit Information

1. The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.
(9 VAC 5-80-490 G.6)

2. Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.
(9 VAC 5-80-490 K.1)

M. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-360 through 9 VAC 5-80-700 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-

310 et seq. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.
(9 VAC 5-80-490 H)

N. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;

2. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;

3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;

4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,

5. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-40-20 E, 90 and 9 VAC 5-50-50 and 9 VAC 5-50-90)

O. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
(9 VAC 5-40-20 E and 9 VAC 5-50-20 E)

P. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1. (9 VAC 5-80-490 J)

Q. Inspection and Entry Requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.

2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.

3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.

4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-490 K.2)

R. Reopening For Cause

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-430 F.

1. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

3. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-490 D.

(9 VAC 5-80-490 L)

S. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.
(9 VAC 5-80-510 E)

T. Transfer of Permits

1. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.
(9 VAC 5-80-520)

2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-560.
(9 VAC 5-80-520)

3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-560.
(9 VAC 5-80-520)

U. Malfunction as an Affirmative Defense

1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of paragraph 2 of this condition are met.

2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:

a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.

b. The permitted facility was at the time being properly operated.

c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.

d. The permittee notified the board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-490 F 2 b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.

3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any requirement applicable to the source.

4. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.

(9 VAC 5-80-650)

V. Permit Revocation or Termination for Cause

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 3. The Board may suspend, under such conditions and for such period of time as the Board may prescribe, any permit for any of the grounds for revocation or termination or for any other violations of these regulations.
(9 VAC 5-80-490 G & L, 9 VAC 5-80-640 and 9 VAC 5-80-660)

W. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any

requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.
(9 VAC 5-80-430 E)

X. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.
(40 CFR Part 82, Subparts A-F)

Y. Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.
(40 CFR Part 68)

Z. Changes to Permits for Emissions Trading

No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.
(9 VAC 5-80-490 I)

AA. Emissions Trading

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

1. All terms and conditions required under 9 VAC 5-80-490 except subsection N, shall be included to determine compliance.

2. The permit shield described in 9 VAC 5-80-500 shall extend to all terms and conditions that allow such increases and decreases in emissions.

3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-360 through 9 VAC 5-80-700.
(9 VAC 5-80-110 I.2)

XVI. State-Only Enforceable Requirements

The following terms and conditions are not required under the federal Clean Air Act or under any of its applicable federal requirements, and are not subject to the requirements of 9 VAC 5-80-290 concerning review of proposed permits by EPA and draft permits by affected states.

1. Odor (9 VAC 5 Chapter 40, Article 2)

2. State toxics rule (9 VAC 5 Chapter 60)

(9 VAC 5-80-490 N)

XVII. Title IV (Phase II Acid Rain) Permit Allowances and Requirements

a. Statutory and Regulatory Authorities.

Statutory and Regulatory Authorities: In accordance with the Air Pollution Control Law of Virginia §10.1-1308 and §10.1-1322, the Environmental Protection Agency (EPA) Final Full Approval of the Operating Permits Program (Titles IV and V) published in the Federal Register December 4, 2001, Volume 66, Number 233, Rules and Regulations, Pages 62961-62967 and effective November 30, 2001, and Title 40, the Code of Federal Regulations §§72.1 through 76.16, the Commonwealth of Virginia Department of Environmental Quality issues this permit pursuant to 9 VAC 5 Chapter 80, Article 3 of the Virginia Regulations for the Control and Abatement of Air Pollution (Federal Operating Permit Article 3).
(9 VAC 5-80-490 B.2)

b. **SO_2 Allowance Allocations and NO_x Requirements for affected units.**
(9 VAC 5-80-490 A.4)

		2013	2014	2015	2016	2017
Unit 3	SO_2 allowances, under Table 2, 40 CFR Part 73 (tons)	1,856 (Notes 1)	1,856 (Notes 1)	1,856 (Notes 1)	1,856 (Notes 1)	1,856 (Notes 1)
	NO_x limit	Pursuant to 40 CFR Part 76, the Commonwealth of Virginia Department of Environmental Quality approves a standard NO_x compliance plan for unit 3, effective for calendar year 2013 through calendar year 2017. Under the NO_x compliance plan, this unit's annual average NO_x emission rate for each year, determined in accordance with 40 CFR Part 75, shall not exceed the applicable emission limitation under [40 CFR 76.7(a)(1), of 0.40 lb/mmBtu of heat input for tangentially fired boilers][40 CFR 76.7(a)(2), of 0.46 lb/mmBtu of heat input for dry bottom wall-fired boilers not applying cell burner technology][40 CFR 76.6(a)(1), of 0.68 lb./mmBtu of heat input for cell burner boilers][40 CFR 76.6(a)(2), of 0.86 lb/mmBtu of heat input for cyclone boilers][40 CFR 76.6(a)(3), of 0.84 lb/mmBtu of heat input for wet bottom boilers][40 CFR 76.6(a)(4), of 0.80 lb/mmBtu of heat input for vertically fired boilers]. If the permittee submits an averaging plan in accordance with 40 CFR Part 76 (76.11(b)(1)) and the DEQ approves the plan, then the permittee shall not exceed the annual average NOx emission rate specified in the averaging plan for those units specified in the averaging plan. The approved averaging plan emission rate will replace the applicable emission limitation listed in 40 CFR 76.6 or 76.7. If a plan is approved and then later rescinded by the DEQ, then the unit's annual average NOx emission rate for each year, determined in accordance with 40 CFR Part 75, shall not exceed the applicable emission limitation under [40 CFR 76.7(a)(1), of 0.40 lb/mmBtu of heat input for tangentially fired boilers][40 CFR 76.7(a)(2), of 0.46 lb./mmBtu of heat input for dry bottom wall-fired boilers not applying cell burner technology][40 CFR 76.6(a)(1), of 0.68 lb/mmBtu of heat input for cell burner boilers][40 CFR 76.6(a)(2), of 0.86 lb/mmBtu of heat input for cyclone boilers][40 CFR 76.6(a)(3), of 0.84 lb/mmBtu of heat input for wet bottom boilers][40 CFR 76.6(a)(4), of 0.80 lb/mmBtu of heat input for vertically fired boilers]. In addition to the described compliance plan, this unit shall comply with all other applicable requirements of 40 CFR 76, including the duty to reapply for a NOx compliance plan and requirements covering excess emissions.				

		2013	2014	2015	2016	2017
Unit 4	SO_2 allowances, under Table 2, 40 CFR Part 73 (tons)	4,678 (Notes 1)	4,678 (Notes 1)	4,678 (Notes 1)	4,678 (Notes 1)	4,678 (Notes 1)
	NO_x limit	Pursuant to 40 CFR Part 76, the Commonwealth of Virginia Department of Environmental Quality approves a standard NO_x compliance plan for unit 4, effective for calendar year 2013 through calendar year 2017. Under the NO_x compliance plan, this unit's annual average NO_x emission rate for each year, determined in accordance with 40 CFR Part 75, shall not exceed the applicable emission limitation under [40 CFR 76.7(a)(1), of 0.40 lb/mmBtu of heat input for tangentially fired boilers][40 CFR 76.7(a)(2), of 0.46 lb/mmBtu of heat input for dry bottom wall-fired boilers not applying cell burner technology][40 CFR 76.6(a)(1), of 0.68 lb./mmBtu of heat input for cell burner boilers][40 CFR 76.6(a)(2), of 0.86 lb/mmBtu of heat input for cyclone boilers][40 CFR 76.6(a)(3), of 0.84 lb/mmBtu of heat input for wet bottom boilers][40 CFR 76.6(a)(4), of 0.80 lb/mmBtu of heat input for vertically fired boilers]. If the permittee submits an averaging plan in accordance with 40 CFR Part 76 (76.11(b)(1)) and the DEQ approves the plan, then the permittee shall not exceed the annual average NOx emission rate specified in the averaging plan for those units specified in the averaging plan. The approved averaging plan emission rate will replace the applicable emission limitation listed in 40 CFR 76.6 or 76.7. If a plan is approved and then later rescinded by the DEQ, then the unit's annual average NOx emission rate for each year, determined in accordance with 40 CFR Part 75, shall not exceed the applicable emission limitation under [40 CFR 76.7(a)(1), of 0.40 lb/mmBtu of heat input for tangentially fired boilers][40 CFR 76.7(a)(2), of 0.46 lb./mmBtu of heat input for dry bottom wall-fired boilers not applying cell burner technology][40 CFR 76.6(a)(1), of 0.68 lb/mmBtu of heat input for cell burner boilers][40 CFR 76.6(a)(2), of 0.86 lb/mmBtu of heat input for cyclone boilers][40 CFR 76.6(a)(3), of 0.84 lb/mmBtu of heat input for wet bottom boilers][40 CFR 76.6(a)(4), of 0.80 lb/mmBtu of heat input for vertically fired boilers]. In addition to the described compliance plan, this unit shall comply with all other applicable requirements of 40 CFR 76, including the duty to reapply for a NOx compliance plan and requirements covering excess emissions.				

		2013	2014	2015	2016	2017
Unit 5	SO_2 allowances, under Table 2, 40 CFR Part 73 (tons)	9,182 (Notes 1)	9,182 (Notes 1)	9,182 (Notes 1)	9,182 (Notes 1)	9,182 (Notes 1)
	NO_x limit	Pursuant to 40 CFR Part 76, the Commonwealth of Virginia Department of Environmental Quality approves a standard NO_x compliance plan for unit 5, effective for calendar year 2013 through calendar year 2017. Under the NO_x compliance plan, this unit's annual average NO_x emission rate for each year, determined in accordance with 40 CFR Part 75, shall not exceed the applicable emission limitation under [40 CFR 76.7(a)(1), of 0.40 lb/mmBtu of heat input for tangentially fired boilers][40 CFR 76.7(a)(2), of 0.46 lb/mmBtu of heat input for dry bottom wall-fired boilers not applying cell burner technology][40 CFR 76.6(a)(1), of 0.68 lb./mmBtu of heat input for cell burner boilers][40 CFR 76.6(a)(2), of 0.86 lb/mmBtu of heat input for cyclone boilers][40 CFR 76.6(a)(3), of 0.84 lb/mmBtu of heat input for wet bottom boilers][40 CFR 76.6(a)(4), of 0.80 lb/mmBtu of heat input for vertically fired boilers]. If the permittee submits an averaging plan in accordance with 40 CFR Part 76 (76.11(b)(1)) and the DEQ approves the plan, then the permittee shall not exceed the annual average NOx emission rate specified in the averaging plan for those units specified in the averaging plan. The approved averaging plan emission rate will replace the applicable emission limitation listed in 40 CFR 76.6 or 76.7. If a plan is approved and then later rescinded by the DEQ, then the unit's annual average NOx emission rate for each year, determined in accordance with 40 CFR Part 75, shall not exceed the applicable emission limitation under [40 CFR 76.7(a)(1), of 0.40 lb/mmBtu of heat input for tangentially fired boilers][40 CFR 76.7(a)(2), of 0.46 lb./mmBtu of heat input for dry bottom wall-fired boilers not applying cell burner technology][40 CFR 76.6(a)(1), of 0.68 lb/mmBtu of heat input for cell burner boilers][40 CFR 76.6(a)(2), of 0.86 lb/mmBtu of heat input for cyclone boilers][40 CFR 76.6(a)(3), of 0.84 lb/mmBtu of heat input for wet bottom boilers][40 CFR 76.6(a)(4), of 0.80 lb/mmBtu of heat input for vertically fired boilers]. In addition to the described compliance plan, this unit shall comply with all other applicable requirements of 40 CFR 76, including the duty to reapply for a NOx compliance plan and requirements covering excess emissions.				

		2013	2014	2015	2016	2017
Unit 6	SO_2 allowances, under Table 2, 40 CFR Part 73 (tons)	16,470 (Notes 1)	16,470 (Notes 1)	16,470 (Notes 1)	16,470 (Notes 1)	16,470 (Notes 1)
	NO_X limit	Pursuant to 40 CFR Part 76, the Commonwealth of Virginia Department of Environmental Quality approves a standard NO_x compliance plan for unit 6, effective for calendar year 2013 through calendar year 2017. Under the NO_x compliance plan, this unit's annual average NO_x emission rate for each year, determined in accordance with 40 CFR Part 75, shall not exceed the applicable emission limitation under [40 CFR 76.7(a)(1), of 0.40 lb/mmBtu of heat input for tangentially fired boilers][40 CFR 76.7(a)(2), of 0.46 lb/mmBtu of heat input for dry bottom wall-fired boilers not applying cell burner technology][40 CFR 76.6(a)(1), of 0.68 lb./mmBtu of heat input for cell burner boilers][40 CFR 76.6(a)(2), of 0.86 lb/mmBtu of heat input for cyclone boilers][40 CFR 76.6(a)(3), of 0.84 lb/mmBtu of heat input for wet bottom boilers][40 CFR 76.6(a)(4), of 0.80 lb/mmBtu of heat input for vertically fired boilers]. If the permittee submits an averaging plan in accordance with 40 CFR Part 76 (76.11(b)(1)) and the DEQ approves the plan, then the permittee shall not exceed the annual average NOx emission rate specified in the averaging plan for those units specified in the averaging plan. The approved averaging plan emission rate will replace the applicable emission limitation listed in 40 CFR 76.6 or 76.7. If a plan is approved and then later rescinded by the DEQ, then the unit's annual average NOx emission rate for each year, determined in accordance with 40 CFR Part 75, shall not exceed the applicable emission limitation under [40 CFR 76.7(a)(1), of 0.40 lb/mmBtu of heat input for tangentially fired boilers][40 CFR 76.7(a)(2), of 0.46 lb./mmBtu of heat input for dry bottom wall-fired boilers not applying cell burner technology][40 CFR 76.6(a)(1), of 0.68 lb/mmBtu of heat input for cell burner boilers][40 CFR 76.6(a)(2), of 0.86 lb/mmBtu of heat input for cyclone boilers][40 CFR 76.6(a)(3), of 0.84 lb/mmBtu of heat input for wet bottom boilers][40 CFR 76.6(a)(4), of 0.80 lb/mmBtu of heat input for vertically fired boilers]. In addition to the described compliance plan, this unit shall comply with all other applicable requirements of 40 CFR 76, including the duty to reapply for a NOx compliance plan and requirements covering excess emissions.				

		2013	2014	2015	2016	2017
Unit 8A	SO_2 allowances, under Table 2, 40 CFR Part 73 (tons)	1,390 (Notes 1)	1,390 (Notes 1)	1,390 (Notes 1)	1,390 (Notes 1)	1,390 (Notes 1)

c. Additional Requirements, Notes, Comments, and Justifications.

1. Additional Requirements:

   (a) Dominion shall submit a complete permit application that includes all of the information required under 40 CFR §§72.21 and 72.31 at least 6 months, but no earlier than 18 months, prior to the date of expiration of the existing Phase II Acid Rain permit. EPA forms shall be used.
   (9 VAC 5-80-430 C.5)

2. Notes.

   (a) SO_2 allowances may be acquired from other sources in addition to those allocated by U.S. EPA. No revision to this permit is necessary in order for the owners and operators of this unit to hold additional allowances recorded in accordance with 40 CFR Part 73. The owners and operators of this unit remain obligated to hold sufficient allowances to account for SO_2 emissions from this unit in accordance with 40 CFR 72.9(c)(1).
   (9 VAC 5-80-420 C.1 and H.1 and 9 VAC 5-80-490 O)

3. Justifications:

   (a) Unit 8A is a gas-fired and oil-fired unit. The heat from Unit 8A is recovered by a heat steam recovery generator labeled Unit 8B. Unit 8B is not equipped with any fuel firing capabilities. Units 8A and 8B are not subject to NO_x limitations under 40 CFR Part 76.
   (9 VAC 5-80-420 D)

XVIII. Clean Air Interstate Rule (CAIR) Permit

The permittee shall comply with all applicable CAIR requirements (9 VAC 5-140-1010 *et seq.*, 9 VAC 5-140-2010 *et seq.*, 9 VAC 5-140-3010 *et seq.*, and 40 CFR Part 96) by the compliance date in the respective Part of 9 VAC 5 Chapter 140, as contained in the CAIR Permit. The CAIR Permit is Appendix A of this document and expires upon expiration of this Title V Permit.
(9 VAC 5-80-490, 40 CFR Part 96 and 9 VAC 5 Chapter 140